AN INVESTIGATION OF CORPORATE MARKETING: IDENTIFICATION OF GROWTH STRATEGY PERFORMANCE MODERATORS

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AN INVESTIGATION OF CORPORATE MARKETING:

IDENTIFICATION OF GROWTH STRATEGY

PERFORMANCE MODERATORS

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PREFACE

Chief executive officers of major corporations have reported marketing to be their primary strategic concern of this decade. Marketing issues that go beyond the marketing mix and cut across the entire breadth of the firm can be labeled Corporate Marketing. Corporate Marketing includes the firm's fundamental growth path from entrepreneurial venture to multibusiness corporation. The findings presented herein elaborate upon the association of product diversification and corporate performance, a key relationship to Corporate Marketing Strategy.

This thesis marks the end of my doctoral education. Many have contributed to my experience, a few of the most notable contributions I wish to recognize here.

I thank my dissertation committee members for their many contributions: Professors Buddy LaForge, Stephen Miller, Clifford Young, and Vance Fried. The Management and Marketing faculty at The University of Tulsa led by Professors Donald Bowen and James Cagley provided sincere encouragement and a sheltered environment to facilitate my completion.

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CHAPTER I

CORPORATE GROWTH STRATEGY AND STRATEGIC MARKETING

Introduction

Marketing executives are increasingly being asked to contribute to strategic decision-making at the highest levels of the firm. Many organizations now realize that corporate decisions on diversification, acquisitions and organizational design can benefit from the customer-oriented perspective provided by marketing. This awakened interest in marketing has increased the strategic importance as well as responsibility of marketing practitioners. This in turn has lead to the need for scholarly inquiry into strategic marketing issues important to top executives.

Several scholars have argued that marketing is becoming more important to the topmost management teams of U.S. corporations (Wind 1982; Wind and Robertson 1983; Day and Wensley 1983). Marketing's importance waned during the 1970s as inflationary pressures and scarce resources emphasized strategic planning and decision-making driven by financial analysis (Day and Wensley 1983). However, the 1980s business climate with its fragmented markets and

stagnant demand has brought a new strategic management approach to corporate planning in which the emphasis on financial portfolio balancing has been replaced by an emphasis on creating sustainable competitive advantage in the marketplace.

Empirical research supports the premise of marketing's growing strategic importance. A 1982 Conference Board study reported marketers are now more likely to be included in the small group of top managers that run most U.S. firms (Marketing News 1982). Sixty-four percent of top executives asked in a 1985 Coopers and Lybrand survey described marketing as the most important management area of the 1980s (Yeskey and Burnett 1986). Just 29 percent had given such importance to marketing at the beginning of the decade. In contrast, only eight percent identified cost control and only five percent labeled financial policy as the most important mangement areas.

Scholars are responding to this expanding strategic role for marketing with important research on top management concerns salient to marketing: diversification (Varadarajan 1986), acquisitions (Kerin and Variaya 1985), collaborative ventures (Varadarajan and Rajaratnam 1986), opening new markets (Kotler 1986), organizational design (Ruekert, Walker and Roering 1985), and implementation of business unit strategies (Ruekert and Walker 1987).

This chapter puts several of these issues together into a single framework describing corporate growth strategy.

Top decision-makers guide the firm's growth from its beginning as a new venture in a single product-market to its maturity as a multibusiness corporation operating in many diverse product-markets. Development of such a growth path involves decisions concerning identification of growth opportunities, diversification, and use of acquisitions. Because such a strategy establishes the firm's fundamental product-market mission, marketers can provide input to and are also impacted by these important strategic decisions.

The choice of a corporate growth strategy has important implications for the practice of marketing throughout the firm. The growth strategy will dictate the focus of marketing efforts, organization of marketing responsibilities, and allocation of marketing resources. In short, much of marketing strategy and implementation begins with the choice of a corporate growth strategy.

This dissertation makes a significant contribution to our understanding of corporate growth by exploring the effect of growth method choice and stage of corporate evolution on the corporate growth strategy/corporate performance relationship. It is proposed that growth method and corporate evolution are important contingencies to be considered in forecasting the success of a corporate growth strategy.

An overview of marketing's strategic role is presented in this chapter. First, a hierarchy of strategic decision-making is used to describe strategic marketing. Next, one

of the most important issues faced by top management, how to grow, is presented by conceptualizing the dimensions of a corporate growth strategy. The chapter's third section, corporate evolution, relates a firm's stage of development to growth strategy. Finally, the chapter concludes by listing the research objectives and contributions. Chapter two and three survey the relevant literature on corporate growth, derive the hypotheses to be tested, and detail a research design for the empirical investigation of the corporate growth strategy/firm performance relationship.

Strategic Marketing

The focus of marketing practice is most often characterized as the traditional marketing management process of creating integrated plans for product, price, promotion, and distribution efforts. Today, marketing executives are also playing an important role in the firm's strategic planning process. Marketing philosophies, skills, and tools of analysis have proved to be useful in many vital strategic decisions beyond the firm's marketing mix. This new strategic marketing role broadens marketing attention to also include such issues as decisions to diversify, implementation of new product internal development, and creation of competitive advantage.

There are many conceptualizations of strategy, strategic planning, and strategic management (Hofer and Schendel 1978; Chaffee 1985). A common theme to most of

these conceptualizations is a hierarchy of strategic decision making. Strategic decisions are made at many levels in an organization from the chief executive officer to the product sales representative (Weitz and Wensley 1984). Jain (1985) defines the strategic decision-making hierarchy in terms of a three level taxonomy: corporate, business unit, and product (see Figure 1). The corporate level refers to decisions basic to the fundamental definition and mission of the firm. At the corporate level, decision-makers choose what business areas in which the firm will operate and coordinate the activities of several strategic business units. The overriding policies of each of these individual business units represent the next type of strategic decisions. Business-level strategies seek to create competitive advantages by offering one or a number of different product lines. Strategic decisions made in the management of each of these product lines represents the third level of the hierarchy, the product level. Here strategic decisions are made in the identification of a number of product-markets to be served through the development of a brand for each. A product-market refers to a particular product aimed at satisfying a particular set of needs and wants in the marketplace. A brand strategy involves determining specific marketing mixes to appeal to each target market to be served.

The strategic role of marketing differs with each type of strategic decision (see Table I). The following sections

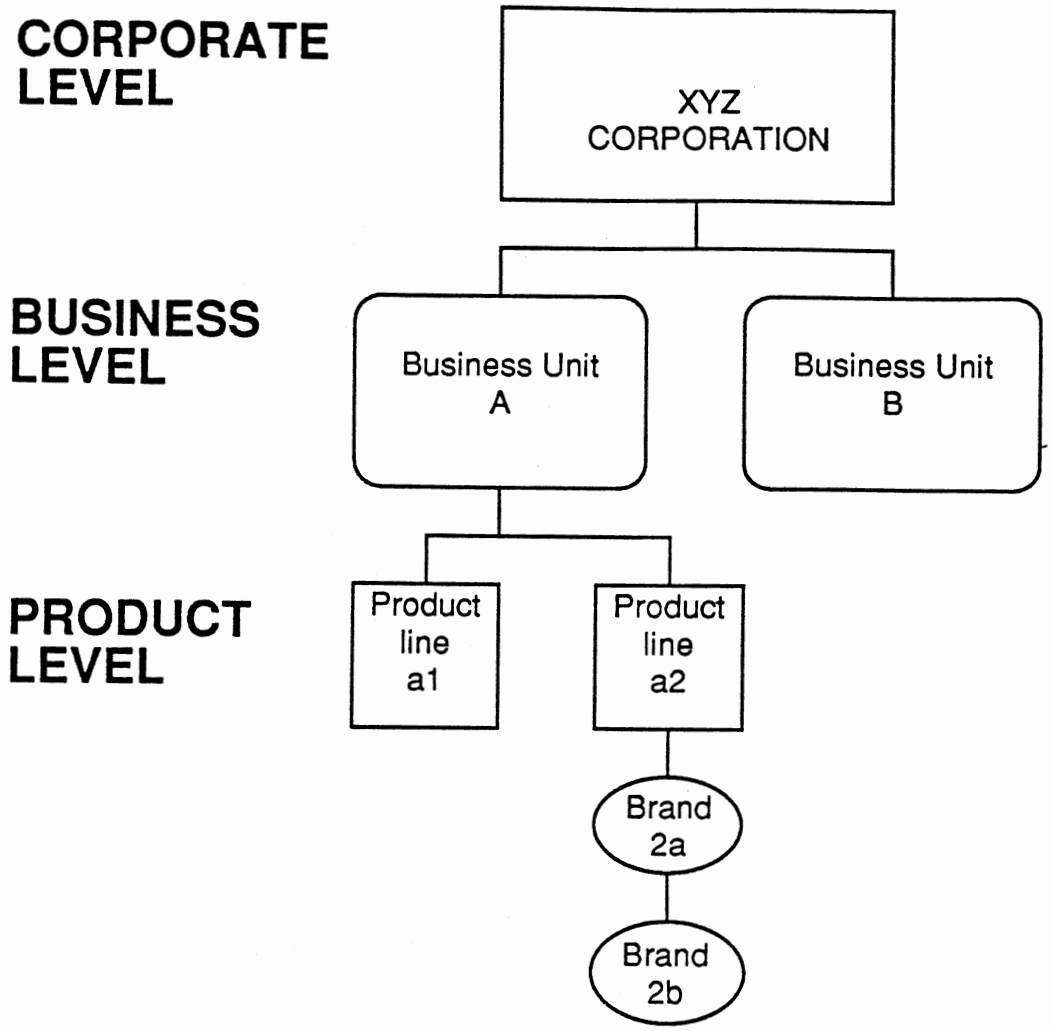

Figure 1. Organizational Decision-Making Levels

describe strategic planning and the strategic role of marketing throughout each of the hierarchial levels.

Corporate Strategy

Corporate strategic decisions define the very identity of the firm. Defining the businesses in which the firm will compete and the objectives to be achieved, corporate strategic decisions serve to set the parameters that guide all strategic decision-making at lower organizational levels.

Corporate strategists face four key decision areas (Cravens 1987). The most fundamental of these is the organization's mission and objectives. The corporate mission defines in a broad way the nature and scope of the firm. It expresses the very identity of the organization in terms of its reason for existence, the scope of products offered, and long-term performance expectations. Although the mission statement is rarely changed, corporate objectives are updated regularly. Corporate objectives set performance goals for the overall organization in terms of growth, profitability, innovation, and productivity. From these corporate-wide objectives, objectives at all levels of the organization are derived.

Marketers are increasingly called upon to provide a market-oriented approach to the development and communication of the corporate mission. The mission statement serves to communicate the identity of the firm to

corporate stakeholder groups such as investors, regulators, employees, and customers. Wind (1982) and Kotler (1986) describe how such marketing tools as segmentation and positioning can be used to secure cooperation and support from stakeholders.

TABLE I

A HIERARCHY OF STRATEGIC DECISIONS

Organizational Level	Key Decisions	Role of Marketing
Corporate	Mission & Objectives Development path SBU definition Strategic guidelines	Providing a customer and market perspective to strategic analysis and choice.
Business	Investment strategy Source of competitive advantage Operating strategies	Source of environmental and market analysis for business strategy; development of the strategic marketing plan.
Product	Product line design Brand positioning	Management of the marketing mix.

A second key corporate decision area is choice of a development path. Most firms start a business in one "core business area." Success leads the firm to choose between

one of several corporate development paths (Cravens 1987). Corporate development paths include expanding from the core business by offering new products to existing markets, expanding from the core business by introducing existing products into new markets, and expanding from the core business by diversifying into completely new product-markets. The development path chosen by the firm's corporate growth strategy and implications of that choice are detailed later in this chapter.

Marketing's strategic role in the analysis of corporate growth and development path decisions is evident in recent research by marketing scholars. Corporate growth issues examined include the performance implications of product diversity (Varadarajan 1986), use of acquisitions by retailers (Kerin and Varaiya 1985), and advantages of collaborative ventures as a technique to achieve marketing advantage.

A third key corporate decision task concerns the formation of strategic business units. As firms develop, they often operate in many diverse businesses simultaneously. To organize for strategic planning, corporate strategists segment their operations into several strategic business units (SBUs). A SBU is a self-contained business composed of product lines having identifiable independence from other product lines in terms of competition, prices, and demand (Jain 1985). The way corporate strategists define the SBU provides direction for

business-level strategists in terms of customers to be served and products to be offered. Marketing input to the the SBU definition task has advocated a customer-centered approach (Day 1984; Cravens and Lamb 1985).

Finally, corporate decision-makers develop strategic guidelines to guide the process of planning within the firm and the allocation of resources across SBUs. Responsibilities for strategic planning are assigned and guidelines for the analysis, communication, and execution of strategic plans are managed. In addition, guidelines for allocation of corporate inputs to be provided SBUs are established. This may include providing the SBUs with low-cost capital, corporate R&D resources, or centralized marketing services to aid the business in competing (Yavitz and Newman 1982). Portfolio models using such marketing variables as market size and growth have been applied to the allocation task (Day 1977). In addition, these guidelines communicate to the SBU the performance criteria by which SBU success will be evaluated at the corporate level.

Business Strategy

Under the umbrella of a single corporate strategy, each strategic business unit develops a strategy unique to their competitive environment. Day (1984) defines business strategy as "integrated actions in the pursuit of sustainable competitive advantage." According to Day, business strategy includes a strategic thrust and supporting

operating strategies. The strategic thrust is conceptualized as having two components: an investment strategy and a source of competitive advantage.

The investment strategy specifies the commitment of resources necessary to support the SBU's competitive thrust. This may include a large investment to grow by building overall market leadership, or more modest investments to achieve selective growth or merely protect current market position. The investment strategy may also specify the harvest of the business areas for short-term cash and eventual divestment.

Investment strategies indicate a firm's commitment to compete but not how it will compete. The source of competitive advantage identifies a skill or distinctive capability that will prove to be an advantage in the marketplace. This distinctive skill is then translated into positional advantage in the marketplace through strategy (Day and Wensley 1988). The SBU may find advantage in its specialized understanding of consumer needs, ability to utilize technology, or efficiency of production. It has been suggested that an SBU may choose from three generic strategies that vary by the competitive advantage being exploited (Porter 1980). Business units may compete on the basis of overall cost leadership, product differentiation, or service of a specialized market niche.

Marketers have contributed product portfolio models and Profit Impact of Market Strategy (PIMS) analysis to the

formulation of these business-level strategies. A number of portfolio approaches have been applied to classify the business unit's product lines by their market position and attractiveness much as they have been used to evaluate business units at the corporate level (Day 1977; Abell and Hammond 1979; Wind, Mahajan, and Swire 1983). This input serves to aid in investment decisons on the growth, harvesting, or diverstment of individual areas of the business. The Strategic Planning Institute's PIMS program has analyzed the pooled business experiences of over 2400 corporations to determine the effectiveness of market strategies. Research indicates widespread corporate use of portfolio and PIMS analysis despite several empirical questions concerning the validity of their conclusions (Jacobson and Aaker 1985; Cravens 1987).

Based upon the business unit's choice of investment strategy and source of competitive advantage, operating strategies for each of the functional areas of the business unit are derived and integrated. Marketing executives develop the strategic marketing operating plan for each business unit.

Cravens (1987) describes the plan as having target market and positioning components. Marketing strategists decide which people to target as favorable markets and key decisions are made in each of the marketing mix elements to position the firm to compete effectively against competitors for each of the target markets. The result is a SBU's

product mix describing the number of product lines to be offered.

Product Strategy

The third tier of the strategic decision hierarchy encompasses decisions concerning management of the product line. For each product line of the SBU's product mix, a product strategy addressing product line design and brand management is developed.

Whereas marketing strategies at the SBU level define the number of product lines or categories (product line width), product line design addresses the individual brands that compose each product line (product line depth). Specific target markets are matched with individual products to form product-markets. The depth of the product line may be extended to reach more product-markets or reduced through elimination of individual brands.

The role of marketing at the product level is the design of an effective marketing mix for each product-market within the product line. For each brand, marketing managers develop, implement, and monitor the deployment of an integrated mix of product, price, promotion, and distribution efforts aimed at serving the specified target market. Development of the marketing mix for each product-market is guided by the strategic marketing plan developed at the SBU level. The result is a plan aimed at each target market segment, expressed in terms of the four marketing mix

variables, and directed toward achieving competitive advantage by satisfying the target consumer.

Corporate Growth Strategy

One of the key corporate decisions is how the firm will develop. A firm may embark upon a growth strategy, maintain the status quo, or end the enterprise and harvest any return on investment. The focus of this research is the performance of firms pursuing various growth strategies as a course of development. A conceptualization of corporate growth strategy and its relationship to marketing practice is described in this section.

A multitude of reasons exist for why a firm's management may choose to implement a growth strategy. Expansion of sales can exploit economies of scale and increase profit margins until some optimum size is reached (Day and Montgomery 1983). Growth may generate increased market power for the firm thereby creating opportunities for predatory pricing, reciprocal buying, and other advantages over rivals (Caves 1981; Montgomery 1985). Many other motives, both economically rational and not, exist to explain the desire to pursue growth.

Although growth is important at all strategic decision-making levels of the organization, the focus of this research is the corporate-level growth decision. Corporate growth strategies specify the fundamental direction and method of the organization's development. A firm may choose

to grow by expanding efforts in the product-markets currently served or diversify into new product-markets. Growth may be accomplished by the use of internal skills and resources or the acquisition of external resources and competencies.

Marketing plays an important role in the formulation and implementation of corporate growth strategy. Marketing executives contribute to the analysis of growth direction and method options. In addition, the focus of marketing practice throughout the firm is dictated by the growth strategy chosen.

The conceptualization of corporate growth strategy offered here is summarized in Figure 2. Although dozens of specific variations are possible, firms pursue one of four basic corporate growth strategies. These strategies differ on the basis of two dimensions: direction and method. Also, the focus of marketing practice differs across strategy options. Growth direction, method, and role of marketing in each of the four growth strategies is described next.

Growth Direction

One dimension of each corporate growth strategy is direction. Direction is the product-market focus of the

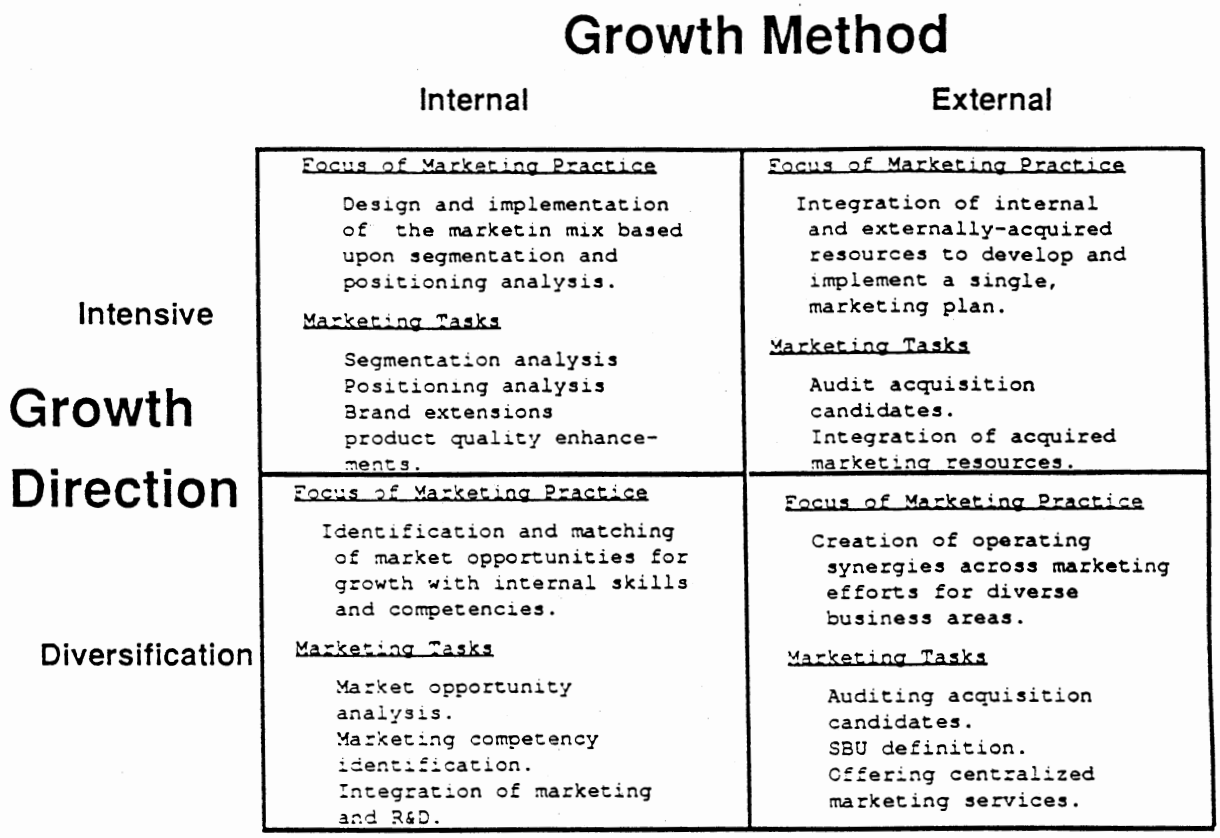

Figure 2. Corporate Growth Strategy Options and The Practice of Marketing

strategy. A firm may seek to generate growth with its current products and markets or generate growth by expanding into new product-markets. These represent the two basic growth direction options for a corporation: intensive and diversification. These options lie at opposite ends of a continuum of growth direction strategies.

Firms operating at the intensive direction end of continuum seek to generate growth using either their current product mix or the current markets served. The purest form of an intensive growth direction is market penetration, remaining in the core product-market served and seeking to expand market share there. As the growth direction moves toward market development (expanding into new markets with existing products), and product development (offering new products to existing markets) it comes closer to the diversification end of the spectrum.

These intensive growth avenues have been the object of much attention in marketing research. Marketing penetration strategies are designed to generate growth within existing product-markets by increasing market share. Successful market share building tactics include improving product quality and increasing expenditures for sales force, advertising, and sales promotion relative to the market growth rate (Buzzell and Wiersema 1981; Jacobsen and Aaker 1987). An effective market development approach to intensive growth is taking the firm's product line to international markets (Ayal and Zif 1979; Anderson and

Coughlan 1987). Extending product lines downward or upward through the market is one product development approach to intensive growth (Shapiro 1977; Kotler 1984).

Firms pursuing strategies at the diversification end of the direction continuum seek to generate growth by entering new business areas that may be related or unrelated to the firm's current operations. Diversification may be chosen to escape poor growth prospects in existing product-markets, take advantage of growth opportunities in new business areas, or as a counter balance to the cyclical sales of existing product-markets (Ansoff 1965). Research indicates diversification to be an increasingly popular growth direction for the largest U.S. corporations (Wrigley 1970; Rumelt 1974; Varadarajan 1986). The most successful diversifiers have been those expanding into new product-markets related to the firm's existing businesses (Rumelt 1974; Palepu 1985; Varadarajan 1986).

Growth Method

Corporate growth strategy has previously been conceptualized in terms of direction only (Ansoff 1965; Varadarajan 1986; Cravens 1987). A second important dimension to all corporate growth strategies is the method or mode of growth. Given a growth direction, the method refers to the sources of the resources and competencies utilized to implement the growth effort. The firm may have or decide to develop the resources internally to accomplish

the growth or it may seek the resources externally. Internal growth method firms rely upon firm resources and competencies as the method of growth. Such firms apply their own marketing, technology, or financial competencies to grow in either intensive or diversification directions. Utilization of firm skills will allow the firm to avoid the expense and coordination of acquiring and integrating competencies developed in outside firms.

In some situations, the firm may seek to acquire the resources needed for growth from external sources. External growth methods may take the form of collaborative ventures or complete acquisitions of firms. Collaborative ventures refer to the teaming of separate entities in a contractual relationship with each partner providing resources unavailable to the other. Acquisition refers to the purchase of assets with the acquired firm no longer existing as a separate entity. Collaborative ventures and acquisition may take may forms (Varadarajan and Rajaratnam 1986) but all can be contrasted with the internal development method of growth in that they involve the firm seeking external sources of resources and competencies to make growth possible.

Growth Strategy and Marketing Practice

The focus of marketing practice within the organization is greatly influenced by the corporate growth strategy

pursued. An examination of fifty successful firms found marketing emphasis differed across firms of contrasting growth direction (Varadarajan 1983). The representation of marketing executives on corporate planning staffs has been found to vary by the growth method used (Berg 1973). The relationship of corporate growth strategy and marketing is best described by examining each of the four growth strategy options.

For firms growing in an intensive direction through internal means, growth is sought in existing products and/or markets. The marketing focus is design and implementation of a marketing mix to achieve sales growth and understanding of the customers in the firm's core business is a key to marketing success. Market segmentation and positioning analysis is applied to generate a successful mix including if necessary the extension of product lines or finding of new markets. Because of its understanding of customers in the core business area, marketing is a central function to the growth effort.

Intensive growth direction firms may also seek external resources and competencies to achieve success. Such firms acquire skills to generate advantage in their existing products and/or markets. The focus of marketing is the successful integration of externally acquired resources with those already existing within the firm; the objective being to develop one unified marketing plan.

Diversification direction and internal method firms develop a marketing focus of matching external growth opportunities with internal competencies. Identifying opportunities in new business areas is a key input provided by marketers. These opportunities are then matched with distinctive competencies in marketing, technology, or production to suggest areas for diversification that exploit the firm's internal resources. In this way, the interface between marketing and other functional areas is critical to the success of this strategy.

Finally, marketing has a unique focus in firms diversifying through acquisition of external resources. These firms are composed of several business units often serving very diverse product-markets. Marketing executives coordinate the marketing efforts within each of these product-markets seeking to identify potential areas of synergy where research, salesforce, and distribution resources can be combined in such a way to generate competitive advantages. This process begins with evaluation of the marketing resources of potential venture partners and acquisition candidiates. Successful firms will generate synergy by exploiting the relatedness of marketing resources across several business areas.

Corporate Evolution

Previous examinations of corporate growth strategies have failed to consider the relationship of a firm's growth

strategy and stage of development. An integration of the two concepts indicates that the stage of a firm's evolutionary development may affect success of the growth strategy employed. This section presents the concept of corporate evolution and concludes that examining the growth strategies of firms in various stages of evolution can add to our understanding of the growth strategy/performance relationship.

Many have sought to describe the growth of firms from the perspective of an evolutionary progression (Steinmetz 1969; Churchill and Lewis 1983; McCann and Cornelius 1987). Firms begin as new ventures in a single product-market. Over time, a firm's potential for growth in that single market is reached and firm seeks growth opportunities elsewhere. This search begins with expansion into related markets and products where the firm feels comfortable applying its existing skills and resources. Next, growth continues into product-markets more diverse than the original core business where the firm began. Eventually, the firm becomes a collection of often diverse business areas with a complex growth strategy of both intensive and diversification directions using both internal and external methods of growth. This final stage of development is characteristic of most large, multibusiness, Fortune 500 corporations (Porter 1987).

The marketing function also evolves as the firm grows. Tyebjee, Bruno, and McIntyre (1983) identified four stages

of marketing evolution. From a new venture marketing to a specific market niche to a diverse collection of businesses each with marketing efforts, the organization and strategies of the marketing function change with firm maturity.

The conceptualization of four corporate growth strategy options is consistent with an evolutionary view of firm and marketing development. Corporate evolution models suggest firms should initially pursue an intensive growth direction within the core business and later re-direct growth efforts to diversification into new businesses. Initially, internal growth methods are preferred until the firm enters businesses unrelated to previous product-markets at which time acquisition growth methods become preferred. Corporate evolution models indicate the appropriateness of growth strategy options is contingent upon the firm's stage of development.

To date, growth strategy research has focused exclusively upon large, multibusiness firms described best by Tyebejee, Bruno, and McIntyre's mature stage four firms. The size and complexity of these firms make them very atypical of U.S. businesses (Chen and Smith 1987). By drawing our research conclusions exclusively from this group of firms, the generalizability of growth strategy conclusions is very limited. In addition, this bias introduces the proposition that stage of evolution may moderate the corporate growth strategy/corporate performance relationship.

Research Objectives and Contributions

This research will examine the relationships between corporate growth strategy direction, corporate growth method, stage of evolution, and corporate performance. It is hypothesized that growth method and stage of corporate evolution are important contingencies to the performance of corporate growth strategies.

This research will examine growth firms in various stages of evolution. Research questions to be addressed include:

1. Does choice of growth method affect the performance of growth strategies? For example, do related diversifiers outperform unrelated diversifying firms regardless of growth method employed?

2. Does the same relationship between corporate growth strategy and corporate performance exist across firms of differing stages of evolution moderate the corporate growth strategy/corporate performance relationship? Is it best, as corporate evolution models suggest, for relatively new ventures to utilize intensive direction and internal growth method while more mature firms would be well-served to employ a diversification direction and external growth method strategy?

The primary objective of this study is to provide new insight into the performance of corporate growth strategies. It does so by making the following contributions:

1. A conceptualization of corporate growth strategy identifying both direction and method dimensions is presented. Previous conceptualization explore growth direction only. The method of growth is expected to also be an important dimension of the growth strategy' success.

2. A richer description of growth strategies will come from the examination of firms in various stages of development. Growth strategy research to date has examined only the largest firms in the U.S. who have reached the most mature stages of corporate evolution. Such a bias may be masking the influence of corporate evolution as an important contingency in growth strategy performance.

3. Explicit identification of moderating variables and the nature of their moderating effect on the corporate growth direction/corporate performance relationship will aid future theory-building in this area as well as provide contingencies for the prescriptive application of growth strategy research findings.

Chapter two will survey the research literature relevant to the concepts being examined in this study. Chapter three formally presents the research questions to be explored and the methodology proposed for their study.

CHAPTER II

A REVIEW OF GROWTH STRATEGY RESEARCH

Introduction

Marketing's strategic role within the firm is expanding. A decision of great importance to marketing executives is the corporate growth strategy. Research on corporate growth strategies by scholars in the industrial organization economics, management policy, finance, and marketing literatures is the domain from which the following literature review has been compiled. Although research exists on a number of aspects describing corporate growth strategies, the focus of this survey is upon the relationship of growth strategy to firm performance.

This chapter is organized around four major constructs of interest: corporate growth direction, corporate growth method, corporate evolution, and corporate performance. The survey begins with corporate growth direction and its relationship to performance. The next sections review two constructs proposed to affect the growth direction/corporate performance relationship, growth method and stage of corporate evolution. Finally, the construct of corporate performance is explored.

Growth Direction Research

A core dimension of all corporate growth strategies is the choice between an intensive or diversification direction. Should the firm stay in its current product-markets and seek sales growth there or expand into new business areas in search of growth? In the last 25 years, a vast literature on the performance implications of choosing an intensive versus diversification direction has accumulated. A selection of the major empirical works is summarized in Table II. Scholars in industrial organization economics (e.g. Gort 1962), management (e.g. Rumelt 1974), finance (e.g. Michel and Shaked 1984), and marketing (e.g. Varadarajan 1986) have explored the relationship between growth direction and performance.

Important to this literature is the evolution in measurement of the diversification construct (Pitts and Hopkins 1982; Shaikh and Varadarajan 1984). The earliest measures used to separate diversifying firms from those growing intensively were continuous product counts. These simple counts of the product-markets in which a firm operated measured only one dimension of diversification -- the extent or degree to which a firm had diversified (e.g. Gort 1962; Bass, Cattin, and Wittink 1978). Later, categorical measures of diversification were employed that assessed another dimension of diversification -- the relatedness of the firm's existing and new product-market

TABLE II

MAJOR STUDIES OF DIVERSIFICATION

Author(s)	Diversity Measure	Sample	Findings
Gort (1962)	Continuous Count	111 firms 1947-57	No significant relationship between diversification extent and performance using three different continuous measures of performance was found.
Arnould (1969)	Continuous Count	104 firms in food processing industry	Modified Gort diversification extent measures and eliminated industry effects but also found no significant relationship between diversification and performance.
Wrigley (1970)	Categorical Extent	1967 Fortune 500	A significant relationship was found between multi-divisional organization structure and diversification extent.
Rumelt (1974)	Categorical Extent, Method	200 firms from 1949,'59,'69 Fortune 500	Significant differences in a number of performance measures was found across diversification categories. Related diversifiers outperformed non-diversifiers who in turn outperformed unrelated diversifiers.
Berry (1975)	Continuous Extent	460 of largest manufacturers during 1960-65	Using a continuous product count weighted by importance of each product to total sales, a positive association between diversification extent and growth in assets was reported.
Christensen & Montgomery (1981)	Categorical Extent, Relatedness	128 firms from Rumelt (1974) study	1972-77 data was added to 128 firms in Rumelt's original database. The market structures in which related and unrelated firms operated were found to be different.
Bettis and Hall (1982)	Categorical Extent, Relatedness	80 Fortune 500 firms during 1973-77	Re-evaluation of Rumelt's findings lead to an alternative explanation for his results. When firms from one industry (pharmaceuticals) were removed from Rumelt's database significant differences between strategies disappeared.
Nathanson & Cassano (1982)	Categorical Product, Market	206 major U.S. firms	Return on capital was more negatively affected by increasing product diversity than by market diversity. Smaller firms outperformed larger in categories of very low and very high diversification.

TABLE II (CONTINUED)

Author(s)	Diversity Measure	Sample	Findings
Montgomery (1982)	Categorical Continuous	128 firms from Rumelt sample	Replicated Rumelt's classifications with high interrater agreement. Also, a 4-digit SIC continuous diversification measure of these firms was consistent with Rumelt's categorical measurement.
Michel and Shaked (1984)	Categorical Extent, Relatedness	51 firms from Fortune 250 during 1976-80	Using market-based measures of performance from the finance literature, conclusions contrary to those of Rumelt were found. Unrelated diversifiers outperformed related diversifiers. Rumelt had used accounting-based measures of performance.
Bettis and Mahajan (1985)	Categorical Extent, Relatedness	80 firms from the Bettis and Hall (1982) study	Added risk as a dependent variable in diversification research. Related firms had a better risk/return relationship than unrelated diversifiers.
Palepu (1985)	Categorical Extent, Relatedness	30 firms in food products industry	No significant relationship between return on sales and diversification was found. However, related diversifiers did generate a significantly higher sales growth rate.
Varadarajan (1986)	Categorical Extent, Relatedness	10 largest firms in each of the 25 largest industries	Similar to Palepu (1985), firms were categorized by breadth and depth of diversification. Intensive growth firms grew at the fastest rate and related diversifiers were the most profitable.

operations (Rumelt 1974; Varadarajan 1986).

The growth direction studies reviewed here will be organized around the evolution described above. Research examining only diversification extent will be discussed first, followed by research incorporating both extent and

relatedness. It is concluded that two major limitations shadow our understanding of the corporate growth direction/performance relationship. First, only samples of very large firms typical of the Fortune 500 have been studied in this research. In fact, many of the most important studies have used the same database (Rumelt 1974; Christensen and Montgomery 1981; Bettis and Hall 1982). A second limitation is the failure to consider growth method as a dimension of growth strategy. It is argued that growth method as well as extent and relatedness is a potentially important determinant of growth strategy performance.

Studies of Diversification Extent

Early research by industrial organization economists found no relationship between diversification and performance (e.g. Gort 1962; Arnould 1969). These studies measured only the extent of a firm's diversification by counting the number of product areas in which the firm did business.

The first measures of these were simple counts of the number of products comprising a firm's product portfolio. The greater the number, the greater the firm's diversification. Firms with a small number were considered to be intensive growth rather than diversification growth firms. The products were counted by examining the total number of Standard Industrial Classification (SIC) categories in which

the firm operated. Each SIC segment served represented one product-market.

Indicative of this initial work is the research by Gort (1962) and Arnould (1969). Defining a product-market as each four-digit SIC segment in which a firm operated, Gort (1962) examined public data for 111 firms and determined each firm's product count for 1954 as well as the number of products added during 1947-54. Neither the 1954 product count nor the 1947-54 change in diversification were significantly correlated with firm profits. Unlike Gort, Arnould (1969) examined the relationship of product count and profitability within only one industry to eliminate any industry biases. He too failed to find a significant association between product count measures of diversification extent and performance.

A major weakness of simple product counts as a measure of diversification is their failure to assess the importance of a product to the firm's overall operations. Scherer (1980) warns these simple counts may exaggerate the overall significance of diversification since only a few products may account for the bulk of a firm's sales. Although the firm operates in dozens of SIC categories, if sales primarily come from just one or two products then diversification will be overstated by simple product count measures.

To correct this, several researchers have used product counts weighted by the contribution of each product to the

firm's total sales (Berry 1975; Bass, Cattin and Wittink 1978; Montgomery 1982). Typical of these is the Herfindahl-type index of diversification used by Berry (1975). An index of zero indicated 100 percent of firm sales coming from a single SIC category. An index of near one indicated firm sales equally spread across a large number of different SIC industries. These studies also failed to identify a clear relationship between extent of diversification and firm performance.

Studies of Diversification Extent And Diversification Relatedness

The first to find a statistically significant relationship between growth direction and performance was Rumelt in his now classic 1974 study. Rather than a continuous measure, Rumelt opted to use a categorical measure of diversification. These categories reflected both the extent and the relatedness of the firm's diversification into new business activities. More recent growth direction research has improved upon Rumelt's laborious and somewhat subjective classification process by illustrating that SIC-based classification schemes are also useful in the measurement of growth direction (Palepu 1985; Varadarajan 1986).

Building upon the growth measure Wrigley (1970) developed to study organizational structure and diversification, Rumelt (1974) placed his sample of Fortune

500 firms into nine strategic categories of diversification (see Table III). He used three ratios of revenue (specialization, related, and vertical) and a qualitative assessment of the underlying logic in the diversification to classify firms.

TABLE III

SUMMARY OF RUMELT (1974) FINDINGS[a]

Diversification Category	Performance Measures[b] ROE	ROC	Sales Growth	ERN Growth
Single Business	13.2	10.8	7.2[c]	4.8[d]
Dominant-Vertical	10.2[d]	8.2[d]	7.4[c]	7.3
Dominant-Constrained	14.9	12.7[f]	9.5	9.1
Dominant-Linked	10.3	8.7	6.9	8.1
Related-Constrained	14.1[e]	12.0[f]	9.6	10.4[e]
Related-Linked	12.3	10.4	8.1	7.2
Unrelated-Passive	10.4	9.4	6.1	7.8
Acquisitive-Conglomerate	13.1[d]	9.6	20.6[f]	18.6[f]
Overall Mean	12.6	10.5	9.0	8.7
F-test significance[g]	.001	.005	.001	.001

[a]Adapted from Rumelt (1974). Cell entries are group means expressed in percentages.
ROE is return on equity. ROC is return on capital. ERN is annual rate of earnings growth.
[c]Significantly less than overall mean ($p<.05$)
[d]Significantly less than overall mean ($p<.01$)
[e]Significantly greater than overall mean ($p<.05$)
[f]Significantly greater than overall mean ($p<.01$)
[g]F-test of group mean differences. Table value is significance at which null hypothesis can be rejected.

This method resulted in three groups of firms with significant differences in performance. Rumelt concluded that firms diversifying into related areas on the basis of a single skill (related-constrained firms) outperformed intensive growth firms (single business firms) who outperformed firms diversifying into unrelated business areas (unrelated passive firms). His findings are consistent with the concept of synergy in corporate strategy (Ansoff 1965). A firm that enters new businesses that are related in key ways to the firm's existing operations should be capable of exploiting synergistic relationships that will increase performance. A firm will fail to find such beneficial relationships in unrelated diversification moves.

Rumelt's measurement of diversification was novel in two ways. First, it was more qualitative and subjective than the SIC-based product counts used in earlier research. Using several sources of secondary data, Rumelt studied in-depth the strategic situations of each firm in a way that may not be adequately reflected in SIC-based product counts. And second, Rumelt measured two dimensions of diversification: extent and relatedness whereas earlier studies had considered only diversification extent. He defined the concept of diversification as:

> "...commitment to diversity per se, together with the strengths, skills, or purposes that span this diversity, shown by the way in which business activities are related one to another." (Rumelt 1974 p. 29)

In so doing, he broadened previous measurement efforts that had only captured the firm's commitment to or extent of diversity through counting the number of products offered.

The significance of Rumelt's findings have not gone unchallenged. Several have considered alternative explanations for his finding that related diversifiers outperformed unrelated diversifiers. One proposition is that industry differences explain the variances in performance found (Christensen and Montgomery 1981; Bettis and Hall 1982). Rumelt's related and unrelated firms were found to operate in significantly different market structure environments and when firms in the pharmaceuticals industry were removed from Rumelt's sample, the significant differences across growth direction strategies disappeared.

Another alternative view is that Rumelt's findings are sensitive to the performance measure employed. His conclusions were based on several accounting-based measures including return-on-equity and return-on-capital. Taking a shareholder's perspective on performance, Michel and Shaked (1984) employed several market-based measures of performance from the finance literature and reported conclusions contrary to Rumelt. Firms diversifying into unrelated business areas outperformed related diversifiers in terms of market values. Dubofsky and Varadarajan (1987) re-examined the Michel and Shaked findings and found market performance measures to be negatively correlated with accounting-based measures, but not significantly. When yet another dimension

of performance, risk, is examined Rumelt's conclusions hold. Bettis and Mahajan (1985) found related firms to have more efficient risk/return performance than unrelated firms.

Despite these criticisms, research employing measures of diversification extent and relatedness has corroborated Rumelt. The most recent of this research has used a modified categorical measure of growth direction that replaces Rumelt's qualitative assessments of relatedness with SIC-based criteria (Palepu 1985; Varadarajan 1986). Montgomery (1982) replicated Rumelt's categorization and found a positive correlation between it and a SIC-based product count measure of diversification. Palepu (1985) in the management literature and Varadarajan (1986) in marketing have constructed diversification measures that like Rumelt capture both extent and relatedness but unlike Rumelt are less qualitative and more objective in the process of categorization. By measuring both dimensions, these two studies found a relationship earlier SIC-based measures had not -- that related diversifiers outperformed unrelated diversification growth firms.

Varadarajan's conceptualization of firm diversity included two dimensions labeled broad-spectrum (BSD) and mean narrow spectrum diversity (MNSD). The BSD is a measure of the extent of a firm's diversification while the MNSD indicates how related are the firm's product-markets. BSD was operationalized as the number of two-digit SIC categories in which the firm concurrently operated. MNSD

was calculated as the number of four-digit SIC categories divided by the number of two-digit categories in which a firm operated. Scores were divided into high and low on each dimension to yield four categories of diversification into which firms were classified.

ANOVA results from analysis of 223 firms indicated significant differences in profitability and growth measures across the diversity groups similar to the pattern reported by Rumelt (1974) (see Table IV). For five-year average

TABLE IV

SUMMARY OF VARADARAJAN (1986) FINDINGS[a]

Diversification Category	Performance Measures[b] ROE	ROTC	Sales Growth	EPS Growth
(A) Low MNSD/Low BSD	15.5	11.6	14.9	9.8
(B) High MNSD/Low BSD	17.2	13.7	13.9	10.2
(C) Low MNSD/High BSD	13.5	9.8	11.1	3.5
(D) High MNSD/High BSD	14.8	11.9	12.2	6.4
ANOVA F-Value	2.69[c]	4.21[d]	2.77[c]	3.57[c]
Significantly Different Mean Pairs[e]	B-C	B-C	A-C	A-C,B-C

[a]Adapted from Varadarajan (1986) N=216. Cell entries are group means.
ROE is return on equity. ROTC is return on total capital. EPS is earnings per share.
[c]Significant ($p<.05$)
[d]Significant ($p<.01$)
[e]Based on Duncan's multiple range test ($p<.05$)

sales growth rate, low BSD/low MNSD firms significantly outperformed high BSD/low MNSD firms. This indicates that less diversified, more intensive growth firms grew more quickly than firms diversifying into a large number of unrelated business areas. For five-year average ROE, related diversifiers significantly outperformed unrelated diversifiers.

Conclusions on Corporate Growth Direction

The first conclusion suggested by existing research is that corporate growth direction defined in terms of diversification extent and product relatedness is associated with corporate performance. Findings from Rumelt (1974), Palepu (1985), and Varadarajan (1986) indicate that related diversification growth strategy firms outperform both intensive growth and unrelated diversification growth firms.

Yet, it has been noted that a wide variation in performance exists within groups of firms following the same growth direction (Nathanson and Cassano 1982; Bettis and Mahajan 1985). This may be explained by another important dimension of corporate growth strategy, growth method. For the most part, studies of growth direction have failed to explicitly consider the effects of growth method and the next section in this chapter will describe growth method research that has for the most part not explicitly considered the role of growth direction. The next important step in corporate growth strategy research is to explicitly

examine the effects of growth method across and within groups of firms with similar growth directions.

A second conclusion derived from existing research on growth direction underscores an important limitation of our understanding of the growth strategy/performance relationship. Almost all studies have sampled the nation's largest and most complex business organizations such as those identified as the Fortune 500 (e.g. Wrigley 1970; Rumelt 1974; Christensen and Montgomery 1981; Michel and Shaked 1984; Varadarajan 1986). Very little is known about the growth strategy performance of smaller firms that make up the great majority of U.S. corporations.

A bias toward sampling only the largest business concerns does introduce significant problems in attempting to generalize across all corporations (Chen and Smith 1987). Because firms in different stages of development vary in experience, resources, and management, it is possible that the success of employing a given growth strategy may be affected by the corporation's stage of evolution.

In the next two sections of this chapter, the constructs of growth method and stage of evolution are introduced as key variables in furthering our understanding of the corporate growth strategy/corporate performance relationship.

Corporate Growth Method

Growth method is the second key decision composing each corporate growth strategy. Although it has rarely been addressed along with growth direction in empirical research, there are a number of insightful studies on the performance of the various growth method options.

Two broad growth method options are available to the firm. A firm may utilize internal development to grow in a chosen direction. A firm may instead opt for an external method of growth such as collaborative ventures with other firms or complete acquisitions of companies possessing the resources and skills needed for growth. This section organizes the growth method literature according to these options. First, research on the internal growth method is reviewed. Next, the acquisition and collaborative venture external growth methods are summarized. Finally, the concept of growth method mix is described.

Internal Method

Research on internal growth methods is dominated by prescriptions for the proper new product development process. Less exists on the performance implications of various internal development strategies. After a short review of the development process literature, this research survey will focus upon empirical evidence of the internal method strategy/firm performance relationship (see Table V).

TABLE V

MAJOR STUDIES OF INTERNAL GROWTH METHOD

Author(s)	Sample	Findings
Calantone and Cooper (1979)	66 Canadian manufacturers	Six precipitating circumstances contributing to the failure of internally developed new product ventures were identified. Defined in terms of these six variables, six failure scenarios were derived from the sample.
Cooper (1979)	195 internal new product developments in 103 firms	Three factors found to be the most important in discriminating between successful and unsuccessful new product developments were uniqueness, marketing proficiency, and technological/production proficiency.
Cooper (1982)	103 Canadian manufacturers	New product development success rate reported was 59 percent with large deviation. R&D spending was not related to success rate of internally developed products but market research, distribution, and promotion resources were correlated with new product performance.
Cooper (1984)	122 Canadian manufacturers	Five strategies for internal development of new products were identified. The strategy associated with the highest level of performance was characterized by a balanced emphasis on both technological innovativeness and marketing technological innovativeness and marketing proficiency.
Gupta, Raj, and Wilemon (1985)	Marketing and R&D managers in 167 high-tech firms	Areas in new product development requiring marketing/R&D integration are identified. Firms with successful new product development programs achieved a greater degree of marketing/R&D integration than unsuccessful firms.

The process of internally developing new products is often conceptualized as having a number of steps (Kotler 1984; Park and Zaltman 1987). Most study on internal methods of growth by marketing scholars has focused upon articulation of a proper process for the development of new products (e.g. Urban and Hauser 1980; Wind 1982). Published research addresses each step of the internal development process including idea generation and screening (Tauber 1972; Alford and Mason 1975; Tauber 1975), product design and development (Kerin, Harvey, and Rothe 1978; Green, Carroll, and Goldberg 1981), market forecasting and testing (Blattberg and Golanty 1978; Silk and Urban 1978), and commercialization (Kotler and Zaltman 1976; Urban and Hauser 1980).

Research focusing upon the process of internal new product development has provided little guidance for the manager seeking to choose the appropriate internal development strategy (Cooper 1984). However, research addressing the performance implications of various internal development strategies is now being generated. Conclusions derived from these empirical studies provide insight into the choice of a successful internal development strategy.

One approach to evaluating internal development strategies has been to identify factors that distinguish internally developed product successes from internally developed failures (Calantone and Cooper 1979; Cooper 1979). Calantone and Cooper (1979) collected data on 89 internal

development failures and used cluster analysis to determine six scenarios of new product failure. A majority of the failures could be described as innovative products that failed to meet any consumer need or as "me-too" products unable to compete with entrenched rivals already in the marketplace.

Marketing proficiency was identified as a key characteristic in distinguishing development successes from failures. Using discriminant analysis to test the prediction capabilities of 18 new product dimensions, Cooper (1979) reported product uniqueness/superiority, market knowledge and marketing proficiency, and technical/ production synergy and proficiency to be the best predictors of new product development success. Although R&D is often mentioned as the core of internal development, Cooper's results indicate that technical proficiency is just one of several factors at the heart of internal development success. The competitive advantage inherent in the product itself and the role of marketing in understanding customer needs are just as vital to internally developed growth projects.

Further research has elaborated upon marketing's important role in the internal development process. Cooper (1982) focused upon overall firm performance rather than the individual new product project. Six performance measures were employed including percent of new product developments that succeeded, overall internal development program

evaluation, and percent of firm sales from new products. Market research, salesforce/distribution, and advertising/promotion resources were significantly and positively correlated to nearly all measures of internal development performance. The strength of a firm's R&D resources was unrelated to four of the six performance measures. This led Cooper to conclude, "Marketing resources appear to be the most critical in deciding a successful new product program," (Cooper 1982, p.221).

A survey of the R&D and marketing dialogue within high-tech firms also highlights the important role of marketing in internal development (Gupta, Raj, and Wilemon 1985). Directors identified a number of important areas in which marketing and R&D should share information. Firms with successful new product development programs achieved a significantly greater degree of R&D/marketing integration in these areas.

Another approach to evaluating internal development strategies has been to identify multivariate strategy scenarios and then compare performance across the scenarios. Cooper's (1984) extensive survey of 122 Canadian industrial product manufacturers identified five strategy scenarios used by firms to guide the internal development of new products. The performance of firms in terms of internal development success was found to differ according to the strategy employed.

Multivariate analysis of 66 strategic variables measured in a mail survey resulted in the identification of five strategy clusters or scenarios. Each firm was classified into one of the five strategy types. The strategies differed on the basis of 19 dimensions including technological innovativeness, product fit and focus, marketing orientation, and R&D spending. The five strategies were labeled: technologically driven, balanced, technologically deficient, low budget conservative, and high budget diverse.

Cooper's balanced strategy firms were found to be the best performers in terms of percentage of new product introductions, success rate of products launched, generating corporate sales and corporate profitability. Cooper investigated the possible moderating role of firm size and strength characteristics as well as industry. Balanced strategy firms were found to be the best performers across all types of firms and industries.

The most successful internal development strategy was characterized by:

* Very high technological sophistication and innovativeness,
* Very high product fit and focus,
* Very high marketing orientation and domination,
* Very high market potential, and
* Very low market newness.

The best internal development strategy was one in which technological and marketing factors were both emphasized. Other firms failed to pay proper attention to one or both of these functions. In the most successful firms, marketing

executives dominated the internal development process and lead the firm to develop technologically innovative products for high-potential markets with a high degree of relatedness to the firm's existing operations.

External Method

External growth method strategies can take several forms. However, each variation is different than internal method strategies in that the firm seeks the resources and skills necessary for growth from outside the firm. Harrigan (1985) refers to external methods of growth as cooperative strategies and distinguishes the types of external methods according to managerial control. Similarly, this review will distinguish between two types of external methods: the acquisition and the collaborative venture (see Table VI). Acquisition and collaborative venture differ primarily on the amount of managerial control the firm wishes to have over the growth strategy. Acquisitions lead to the creation of a larger corporation with the acquired company ceasing to exist. This gives the acquiring firm full managerial control over the skills and resources acquired. Collaborative ventures include joint equity ventures and contractual arrangements between firms in which the partners continue to exist as independent entities while sharing management responsibilities for the growth project.

The acquisition external method. The impact of acquisitions on corporate performance has not been

impressive. Hogarty (1970) concluded from pre-1970s acquisition research that the acquisitions studied had a negative or at best neutral impact on performance. Mueller (1977) reviewed eight 1970s empirical examinations and found shareholders of acquiring firms did not gain from the acquisition strategy. Shareholders of acquired firms did however benefit due to the premiums paid for the acquisition target. More recently, Kerin and Varaiya (1985) reached similar conclusions in their study of acquisitions in the retailing industry.

Work by Reid (1968) in economics and Weston and Mansinghka (1971) in finance is indicative of the early empirical research on the relationship between acquisition growth method strategy and firm performance. Reid classified large industrial firms into internal method and acquisition method strategy groups based upon their 1951-61 acquisition record. Firms with the most acquisitions had the highest average sales growth during the study period. However, these firms lagged behind internal growth firms in returns to shareholders. Weston and Mansinghka (1971) found conglomerate, acquisition growth firms to have 1968 earnings efficiency performance not significantly better than the Fortune 500 overall.

TABLE VI

MAJOR STUDIES OF EXTERNAL GROWTH METHOD

Author(s)	Method Examined	Sample	Findings
Kitching (1967)	Acquisition	22 external growth firms	45% of all acquisitions were of the unrelated, conglomerate type. Executives reported the highest failure rates were in concentric marketing and technology mergers.
Reid (1968)	Acquisition	478 large U.S. industrial firms during 1951-61	Firms with the most acquisitions reported the greatest sales growth rate but internal growth firms had highest increase in share price during the period. Among external growth firms, those using unrelated conglomerate acquisitions had the greatest sales growth and share price increase.
Weston and Mansinghka (1971)	Acquisition	63 highly diversified, acquisition growth firms	Conglomerate firms were found to have generated greater sales and net income growth rates than a control group of other Fortune 500 firms during 1958-68. Increase in conglomerate earnings performance provided support for defensive diversification explanation.
Melicher and Rush (1974)	Acquisition	61 conglomerate and 71 non-conglomerate firms	Support for the defensive diversification hypothesis was reported. Conglomerate firms had lower pre-acquisition profitability and sought more profitable acquisition targets than non-conglomerate firms.
Kerin and Varaiya (1985)	Acquisition	18 acquisitions by retailers between 1976-83	Acquisition was identified as a common growth strategy within the retailing industry. Yet, the acquisitions did not benefit the shareholders of the acquiring firm.
Kusewitt (1985)	Acquisition	128 firms with large acquisitions during 1967-76	Five acquisition strategy variables explained over 27% of variation in firm ROA during study period. Industry commonality between acquiring and target firm was significantly correlated with ROA.
Chatterjee (1986)	Acquisition	157 acquisitions during 1969-72	Acquisitions were categorized by the nature of the synergy targeted. Acquisition of unrelated firms in an attempt to exploit financial synergy was associated with greater market returns than acquisition of related firms to exploit operating synergies.

TABLE VI (CONTINUED)

Author(s)	Method Examined	Sample	Findings
Lubatkin (1987)	Acquisition	439 NYSE firms using acquisitions during 1948-79	Concentric acquisitions of related firms did not result in greater market-based returns than unrelated conglomerate acquisitions. Investors evaluate acquisitions on other than product or market relatedness.
Killing (1983)	Collaborative Venture	35 joint ventures both domestic and international	Approximately one-third of the ventures examined failed and the type of managerial control arrangement was significant in predicting success of the joint venture. Most successful ventures were those with one parent dominating decision-making.
Coopers & Lybrand (1984)	Collaborative Venture	38 collaborative ventures	Only 12 of the 38 ventures met or exceeded the expectations of the partners.
Harrigan (1985)	Collaborative Venture	492 joint ventures in 25 industries	Joint ventures are more likely to be employed when the relationship is strategically important to both partners, otherwise acquisition is likely. Joint ventures were reported to be difficult to manage and have a low probability of success.

Such research led Hogarty (1970) to conclude:

> What can fifty years of research tell us about the profitability of mergers?...(N)o one who has undertaken a major empirical study of mergers has concluded that mergers are profitable...in the sense of being 'more profitable' than alternative forms of investment. (1970, p.389)

Lubatkin (1983) argued that early research on acquisition performance was biased in treating all acquisitions as if they were of the same form. In terms of the corporate growth strategy conceptualization, intensive

direction acquisitions had not been distinguished from diverisification direction acquisitions. He advocated a contingency approach that would explicitly consider the differences in acquisitions and how these factors might moderate acquisition strategy performance.

One of the most important of these contingencies is the synergy creation attempted in the acquisition. Acquisitions are often explained as the synergistic joining of resources to create a new organization greater than the sum of the individual firms (Lubatkin 1983; Chatterjee 1986). Such an outcome may be derived from the exploitation of synergies in financing or from operating synergies such as in marketing or technology (Ansoff 1965). Horizontal acquisitions (acquiring a firm within the same industry) and marketing or technology concentric acquisitions (acquiring a firm in a different industry but one related by marketing or technology) are designed to exploit operating synergies. Horizontal acquisitions are those made by firms employing an intensive or a related diversification growth direction. Conglomerate acquisitions (acquiring a firm unrelated to existing businesses) are designed to exploit financial synergies. These acquisitions would be associated with an unrelated diversification corporate growth direction strategy.

Kitching (1967) made the distinction between acquisition types and found concentric marketing and technology acquisitions to have a higher rate of failure

than conglomerate acquisitions. Chatterjee (1986) reported non-horizontal acquisitions attempting to exploit financial synergy generated greater value than those designed to exploit operating synergies. Similarly, another study found concentric acquisitions into related business areas did not yield greater market-based returns than acquisitions of unrelated firms (Lubatkin 1987).

In conclusion, it appears that choice of growth direction and choice of an acquisition growth method interact to affect corporate performance. Acquisitions of the conglomerate type used in conjunction with unrelated diversification strategies have been identified as the top performing acquisition strategies. Acquisitions used in intensive and related diversification growth directions are the least successful. This may be due to the financial synergies of conglomerate growth being easier to achieve than the operating synergies sought in horizontal acquisitions (Kitching 1967).

The collaborative venture external method. The collaborative venture strategy is the least often used growth method but its status as an attractive option has found recent popularity (Business Week 1986). This growth external growth method is plagued by great management challenges as 70 percent of such ventures will fail (Business Week 1986).

Joint ventures have historically been alliances with foreign partners as a route to foreign market entry. Yet,

today one-third of all joint ventures are with domestic partners (Killing 1983). Many of these domestic ventures are symbiotic marketing arrangements designed to increase sales to existing customers, generate new products for existing markets, and achieve product diversification. Varadarajan and Rajaratanam (1986) note that advances in technology, intensive competition, and deregulation have motivated firms to create such alliances.

There is little empirical research on the collaborative venture/firm performance relationship. The conclusion to be drawn from a review of what research does exist is that collaborative ventures suffer from high failure rates due to the difficulty in managing such a venture with a partner. Collaborative venture failure rates have been reported as 31 percent (Killing 1983), 68 percent (Coopers & Lybrand 1984), and 50.3 percent (Porter 1987).

One significant factor in the high failure rate is the unique challenges in two different management teams attempting to direct a single business venture. Harrigan (1985) described joint ventures as more likely to occur when the alliance was of strategic importance to both, not just one partner. The importance of the venture to both partners makes management participation by both likely. Indeed, the failure rate of ventures appears to be contingent upon the managerial control arrangement used (Killing 1983). Ventures most likely to fail are those in which partners attempt to share management duties. Killing found ventures

with one parent dominating venture decision-making to have the highest success rate.

Although a great need exists for more information on the performance of collaborative ventures, what is known now about these external methods of growth presents a paradox. Firms seek collaborative ventures as a means of sharing strengths and resources (Coopers & Lybrand 1984) but the most successful ventures are those in which one partner has the skills necessary to lead the venture without sharing management responsibilities with other partners (Killing 1983).

The Mix of Growth Methods Used

A corporate growth method strategy may be composed of a mix of the internal development, acquisition, and collaborative venture methods discussed above. Some firms predominately use acquisitions, others predominately internal development, and still others a combination of these. Research has addressed this mix of growth methods employed (see Table VII). For example, Porter (1987) identifed the growth methods utilized by 33 leading corporations over a 36-year span. He found that some firms consistently rely upon the use of just one growth method while other firms will simultaneously utilize both internal and external methods. The performance of each type of growth method differed significantly.

Previous research indicates that the organizational processes of firms differ by growth method employed. Berg (1973) placed nine large highly diversified corporations into two groups: those diversifying by internal development methods and those using external methods. A comparison of the corporate staffs of these firms indicated significant differences in their size and composition. This indicates a completely different organizational effort at the corporate level is needed to grow by internal development rather than acquisition.

Significant differences in firms with different growth strategies have also been found in the compensation of top management, and the inter-divisional transfer of management (Pitts 1974, 1976). This led Pitts to conclude that internally growing firms have very different organizational structures and processes than firms predominately using an external growth method and that furthermore, these differences make the simultaneous usage of the two growth methods incompatible. Firms should specialize in one growth method because of the nature of the processes and structures needed to support that method.

TABLE VII

MAJOR STUDIES OF GROWTH METHOD MIX

Author(s)	Sample	Findings
Berg (1973)	9 large, highly diversified firms	Corporate staff size and composition differed between firms using internal and external methods of diversification.
Pitts (1974)	11 Fortune 500 firms in 12 or more 3-digit SICs	Compensation practices differed between internal and external diversifying firms.
Pitts (1976)	10 diversified firms in 6 or more SICs	Interdivisional transfers of management differed across firms using internal and external growth methods.
Lamont and Anderson (1985)	50 firms from the 1982 Fortune 500	No relationship between the mix of growth methods and firm profitability or growth was found.
Porter (1987)	33 prominent U.S. corporations	Firms used internal start-ups, joint ventures, and acquisition methods in various mixes. Growth projects using the acquisition method had the highest failure rate of all methods, internal development the lowest.

Yet, a test of Pitts' proposition failed to find support. Lamont and Anderson (1985) examined the method mix used in diversification growth efforts only. Thirty-six percent of the firms studied employed a mix of internal and external methods to diversify. The performance of these firms over a five-year period was not significantly different than firms specializing in just one growth method. This indicates specialization in the method mix may not be as important as Pitts proposed.

Conclusions on Growth Method

This survey of studies examining the performance of growth method approaches indicates that not all methods are equally successful. According to Porter's (1987) examination of 3,788 growth projects by 33 leading corporations, 44 percent of all internal start-ups made by 1980 had failed by 1987 compared to 50.3 percent of all joint ventures and 74 percent of acquisitions.

In addition, the research suggests success of a growth project depends upon the combination of growth direction and growth method utilized. Firms employing internal methods of growth when product relatedness was high as in intensive and related diversification growth directions were reported to have higher levels of performance. Growth by external acquisition methods was found to be more successful in situations of low operating synergies as with an unrelated diversification direction. Therefore, the interaction of growth direction and growth method appears to be an important issue in the examination of corporate growth strategy performance.

Corporate Evolution

The development of a firm over time has been likened to a biological life cycle process similar to the important product life cycle concept of marketing theory (Day 1981; Gardner 1987). The firm originates as an entrepreneurial venture, passes through a predictable series of

developmental stages, and eventually reaches maturity. The resulting firm is very different than the originating venture.

Several variations of the firm development model have been proposed (see Table VIII). Each describes characteristics of the firm at different stages of development. Three important characteristics proposed to evolve over time are firm size, role of the founder(s), and corporate growth strategies employed. A brief description of the major corporate evolution models and their prescriptions for these variables is presented in this section.

Corporate Evolution Models

Models of corporate evolution describe the changing nature of firms over increasing time and size (e.g. Chandler 1962; Steinmetz 1969; Scott 1971; Galbraith 1982). Generally, the relationship described is some firm characteristic and time. For example, Chandler (1962) focused upon changes in organizational structure over time while Steinmetz (1969) examined changes in the nature of managerial control over the life of the corporation. While helpful as broad conceptualizations, two qualifications must be made in applying these development models.

TABLE VIII

MAJOR MODELS OF FIRM DEVELOPMENT

Author(s)	Stages of Development	Contribution
Chandler (1962)	1. Initial expansion 2. Rationalization 3. Expansion 4. New structure	Historical analysis indicates the most successful firms expand geographically, integrate vertically, and then diversify. Development of a new organizational structure follows each strategy change.
Steinmetz (1969)	1. Direct supervision 2. Supervised supervisor 3. Indirect control 4. Divisional organization	Three critical points in firm development that determine success or demise are identified.
Cooper (1979)	1. Start-up 2. Early-growth 3. Later-growth	In addition to development stages, three types of firms are distinguished: mom and pop firms, stable high-payoff firms, and growth-oriented firms.
Churchill and Lewis (1983)	1. Existence 2. Survival 3. Success 4. Take-off 5. Resource maturity	This framework, unlike previous conceptualizations, does not assume a firm will pass through all five stages. A firm may disengage after reaching the success stage.
McNichols (1983)	1. Anchor 2. Entrenchment 3. Defensive 4. Decline	Growth direction and method strategies vary across firm development stages.
Tyebjee, Bruno, and McIntyre (1983)	1. Entrepreneurial 2. Opportunistic 3. Responsive 4. Diversified	As a subset of firm development, an evolution of marketing strategies, organization, goals, and critical success factors takes place.
McCann and Cornelius (1987)	1. Start-up 2. Take-off 3. Strategic positioning 4. Sustained performance or decline	Empirical research indicates a significant relationship between firm development and use of acquisitions. Mature firms are more likely to use acquisition as a growth method strategy.

First, not all firms advance through a "typical" life cycle. Churchill and Lewis (1983) noted that some firms reach a certain growth plateau and choose to grow no more. In terms of the evolution model, such firms cease to develop to latter stages. Therefore, the growth orientation of the firm must be indentified before applying the corporate evolution model to that firm.

A typology of firms has been proposed to identify a firm's growth orientation (Cooper 1979). Only firms identified as "highly growth oriented" can be expected to develop over time in terms of the typical evolution model. Such firms are driven by management aspiring to grow the firm to the limits of its potential. For many other firms, a small "mom and pop" operation generating a reasonable income is the owners' only aspiration.

A second qualification to the application of these models is their "lack of any empirical underpinning" (Stanworth and Curran 1976). Development of models has been described as "wisdom-based," originating from an author's undefined past experiences or perhaps from a small number of case studies (Arnold 1979). As a result, there is little empirical evidence to validate the existence or nature of corporate evolution models.

Evolving Firm Characteristics

The first major empirical work on the history of firm development was Chandler (1962). He concluded that

corporate growth strategies, then organizational structures, changed over the lives of four successful firms. The histories of Du Pont, General Motors, Standard Oil of New Jersey, and Sears, Roebuck and Company were explored to identify the relationship between strategy and organizational structure. Four chapters in the development of these firms could be described in terms of resource management. In the first, resources are accumulated to meet the demands of the firm's chosen market. Vertical integration was a common approach to this accumulation. The second chapter was the rationalization of this integrative expansion through the development of an organization structure that established functional managers to oversee marketing, production, and the other major business functions. Chapter three brought a new period of expansion for the firm. Product lines were extended and the firm diversified into new products and markets. In chapter four, structural changes again followed this new strategy as divisional organizational structures emerged. In each firm, development was from a simple single business venture to a more complex, multi-divisional enterprise of many products serving many markets.

Rather than the evolution of organizational structures, Steinmetz (1969) focused upon changes in firm management. He defined stages of evolution in terms of firm size as indicated by total assets and numbers of employees. From an enterprise in which the small business entrepreneur has

direct supervision over all operations, firms develop into large organizations in which most decision-making is delegated to others and the founder is left with only indirect control. Steinmetz concludes firms must survive three critical points in their development and ultimately evolve into a multi-divisional firm or cease to exist.

The Churchill and Lewis (1983) model incorporated the concept of a firm's growth orientation. The authors obtained data from 83 successful small businesses to develop a five-stage model in which the firm may opt for the status-quo rather than continued growth. After a period of establishing the business and struggling to survive, the organization reaches a success plateau. Two options are available to the firm at this stage. First, the firm may be positioned as a means of financial support for the owners. The goal is to maintain a profitable status quo. The second option is to position the firm as a platform for future growth. In this case, resources are gathered and the firm begins to take-off on a new growth effort complete with the expansion of product lines and product diversification.

Churchill and Lewis (1983) measured corporate evolution over time represented by the age of the firm. Each stage of evolution was defined in terms of the firm's value-added, geographical diversity, and the number of product lines and technologies employed by the firm.

The Churchill and Lewis framework indicates that a firm's growth orientation will affect the firm's evolution.

Such a typology of firms was suggested by Cooper (1979). He noted the majority of small businesses are "mom and pop" firms with no professional management and no growth aspirations. Many small firms might be classified as stable, high-payoff companies. These firms have achieved a limited amount of growth, have a strong competitive position in a specific market niche, but have no further aspirations for growth. Without the pressures of growth, the firm supplies the founder with profit and freedom to be somewhat disengaged from the business. A third type of firm is highly growth-oriented. Management of these firms is agressive and often highly innovative in marketing or production. Owners aspire to develop a large enterprise and profit from the market power of such firms.

The models just described conceptualize the evolution of firm's primarily in terms of their size, age, and management characteristics. Others have argued that corporate growth strategies also evolve over the life of an organization.

As a firm matures, growth direction emphasis changes from intensive to diversification and the growth methods used are increasingly dominated by external methods especially acquisition (McNichols 1983). A firm's early focus is on intensive growth to anchor itself into served markets and become entrenched against competitive threats. Yet, when growth in the core business slows but the firm's growth aspirations remain, diversification is likely to

occur. The first diversification efforts are likely to be made through internal development methods but as the diversification effort continues and the firm exhausts its own expertise, acquisitions will become more frequent.

Tyebjee, Bruno, and McIntyre (1983) describe the same pattern of development in terms of the firm's marketing strategy (see Table IX). A market niche strategy evolves into a market penetration strategy that is similar to what McNichols terms entrenchment. This is followed by product-market development and finally diversification into completely new business areas. The focus of marketing evolves from establishing a market niche for the entrepreneurial venture to life cycle management of a portfolio of many products in many businesses.

Limited empirical support for this relationship between firm stage of development and growth strategy has recently been reported (McCann and Cornelius 1987). An examination of 799 growth-oriented firms recognized by INC magazine as among the fastest growing small firms found a correlation between firm age and use of acquisitions. As would be predicted by firm development models, the more evolved firms in terms of age were more likely to use acquisitions as a method of growth than younger firms.

TABLE IX

EVOLUTION OF MARKETING STRATEGY[a]

	Stage 1 Entrepreneurial Marketing	Stage 2 Opportunistic Marketing	Stage 3 Responsive Marketing	Stage 4 Diversified Marketing
Marketing Strategy	Market Niche	Market Penetration	Product-Market Development	New Business Development
Marketing Organization	Informal, Flexible	Sales Management	Product-Market Management	Corporate and divisional levels
Marketing Goals	Credibility in the marketplace	Sales Volume	Customer Satisfaction	Portfolio Management

[a] Adapted from Tyebjee, Bruno, and McIntyre (1983)

In summary, corporate evolution models suggest firms in early stages of evolution are more likely to employ a corporate growth strategy characterized by intensive direction and internal growth method. These firms are characterized as relatively young, relatively small, and managed through a centralized organization. Firms in latter stages of evolution employ growth strategies characterized by diversification direction and external growth method. These firms are relatively older, larger in size, and decentralized in management structure.

Existing research on corporate evolution has yet to consider the implications of these evolving firm characteristics on corporate performance. What of firms that grow by acquisitions in early stages of development rather than later? Do they suffer from poorer performance than firms in latter stages that use acquisitions? Is the performance of relatively small and young diversified firms less than larger and older diversifiers? Models of corporate evolution imply the answers to these questions is yes but empirical research to date has yet to test corporate evolution as a moderator of corporate growth strategy performance.

Corporate Performance

The construct of performance is at the core of all marketing strategy research. Since the research focus here is the performance implications of corporate growth strategy choice, the unit of analysis is the overall corporation rather than a single business unit or product-market. Therefore, the perspective of corporate-level management is taken in conceptualizing performance. Previous work in the development of organizational effectiveness theory provides a useful framework for surveying the performance dimensions of interest in corporate growth strategy research.

The concept of firm or business performance is included within the larger organizational effectiveness construct (Venkatraman and Ramanujam 1986). It includes both

operational and financial indicators of performance from both primary and secondary data sources. Multiple models of organizational effectiveness have been proposed (Cunningham 1977; Cameron and Whetten 1983). This section will briefly describe and contrast the two major conceptualizations of organizational effectiveness. Previous conceptualizations of performance in the growth strategy literature will then be related to these models.

Models of Organizational Effectiveness

The different models of organizational effectiveness reflect fundamentally different conceptualizations of what an organization is. One view describes the organization in terms of a natural living system (Katz and Kahn 1978). The performance of such an organization is fundamentally goalless; its existence can only be evaluated broadly in terms of system equilibrium and maintenance. A second major conceptualization of the organization is as a rational goal pursuer (Bluedorn 1983). This view sees organizational goals being established and individual needs being held subordinate to organizational accomplishment; where accomplishment or performance is seen as progress made toward meeting organizational goals.

From these two conceptualizations of the organization are derived the two leading models of organizational effectiveness: the systems approach and the goal model. The systems approach evaluates performance in terms of the

firm's systemic properties and processes that work toward environmental equilibrium. The environment is defined in terms of the firm's multiple constituencies (employees, stockholders, competitors, etc.) and performance is conceptualized as the ability to manage relationships with these constituencies. From a systems viewpoint, management of the system's interdependencies with constituencies is key to survival (Pfeffer and Salancik 1978).

The goal model of organizational effectiveness is consistent with viewing the organization as a rational goal pursuer. Unlike the natural system, each firm has definable specific purposes or goals and so effectiveness is the firm's progress toward attainment of those goals. This model holds that organizational effectiveness measures should be based upon either explicit or implied goals of the firm (Scott 1977; Bluedorn 1980).

Corporate Growth Strategy Performance

From the perspective of the systems approach to effectiveness, growth strategy performance has been conceptualized according to the interests of two constituency viewpoints. Performance has been defined in terms of the firm's return to shareholders through the use of financial theory-based measures (e.g. Michel and Shaked 1984). Obviously for a major constituency of the firm, stock market value and associated return is the major criterion of firm performance. Performance has also been

defined in terms of accounting-based returns. Sales and profitability growth, return on equity, and return on capital represent key indicators of performance to other constituencies of the firm.

From the marketer's perspective, the key constituency is the customer and a key indicant of performance is the long-term trend of sales. It has been argued that the strategic role of marketing within the corporation is to meet the needs of one major public of the firm, the customer (Anderson 1982). Long-term sales growth is one indication that the firm's customer public is being satisfied in a manner consistent with the marketing concept's goal of long-run customer satisfaction.

Within the framework of the goal model of organizational effectiveness, growth strategy performance has assessed success in meeting objectives of growth and profitability (e.g. Varadarajan 1986). By definition, sales growth may be considered an explicit goal of any corporate growth strategy. While some firms will sacrifice short-term profitability to achieve growth, eventually profitability must emerge as an important corporate goal. The three most commonly examined indicators of profitability have been return on equity (ROE), return on capital (ROC), and return on sales (ROS). Palepu (1985) noted that ROS was preferable to ROE because of the potential for bias in comparing equity across firms with different levels of acquisition.

The two schools of thought on effectiveness suggest that from a marketing perspective growth strategy performance is best defined in terms of sales growth and return on sales. Sales is an indicator of the firm's management of its relationship with the customer constituency and also an explict goal of growth strategy. Growth strategy research reflects this orientation (Rumelt 1974; Palepu 1985; Varadarajan 1986). Past research has found significant differences in both sales growth and profitability across firms of different growth direction. It has also been suggested that among mid-size and small corporations, sales growth and return on sales effectively define performance from both the systems and goal model view (Friedlander and Pickle 1968; Robinson 1983).

Risk has also been proposed as a key dimension of corporate performance. No strategic decision should be made from the perspective of return alone since greater investment return is highly correlated with greater risk (Aaker and Jacobson 1987; Jemison 1987).

Bettis and Hall (1982) first examined risk as a salient dimension of growth strategy performance. Using return on assets (ROA) and its standard deviation as a measure of the risk/return relationship, they found risk/return varied across growth strategy categories. When firms were clustered by their risk/return performance, different growth directions resulted in similar risk/return levels (Bettis and Mahajan 1985). The authors' found that although related

diversifiers have been associated with high levels of return, the strategy is no guarantee of a favorable risk/return performance. Further support for the significance of risk defined by both accounting-based and market-based methods has been reported (Aaker and Jacobson 1987).

This review indicates that from the perspective of both schools of thought on organizational effectiveness, sales growth and return on sales are two primary indicators of evaluating corporate growth strategy performance from the perspective of the marketing function.

Research Review Conclusions

Review of previous research on the corporate growth strategy/corporate performance association produces several important conclusions. First, past growth direction study is limited in that the role of growth method choice in determining performance has received little direct attention. Also, past research has been developed with an almost exclusive focus on only the very largest and most well established corporations. The research on growth method and stage of corporate evolution hint at their salience in determining corporate performance. Therefore, the review suggests a logical next extension of this literature to be study of the possible moderating roles of both growth method strategy and corporate evolution.

CHAPTER III

RESEARCH HYPOTHESES AND METHODOLOGY

Introduction

In chapter two, major research on the corporate growth strategy/corporate performance relationship was surveyed. Previous research has examined primarily only the direction of corporate growth strategies. Two additional concepts, growth method and corporate evolution, were also reviewed to provide insight into the performance implications of corporate growth strategy choice. Research questions concerning the nature of relationships between growth direction, growth method, and stage of corporate evolution are operationalized in this chapter.

First, hypotheses that guide the research are presented. Next, the measurement of each construct is described. Finally, the sampling plan, data collection, and data analysis are described.

Hypotheses To Be Tested

Two basic research questions follow from the literature assessment just presented: (1) What, if any, relationship does growth method have on the corporate growth strategy/corporate performance relationship, and (2) What,

if any, relationship does corporate evolution have on the corporate growth strategy/corporate performance relationship?

The relationships hypothesized are presented in Figure 3. It is proposed that growth method and corporate evolution moderate the growth direction strategy/corporate performance relationship. In other words, the performance of a given corporate growth direction will vary depending upon the growth method chosen. The performance of corporate growth direction strategies will also vary across different stages of corporate evolution. Several hypotheses to empirically test these relationships are developed in this section.

Past research has identified two dimensions important to defining the success of corporate growth direction: the extent of diversification into new product-markets and the relatedness of those product-markets. Firms diversifying into related product-markets have been found to outperform intensive growth and unrelated diversification growth strategy firms (Rumelt 1974; Varadarajan 1986). This finding has been explained in terms of synergy. Synergy occurs when a firm creates a product portfolio with a combined performance greater than the sum of its individual products (Ansoff 1965). This may result from product-

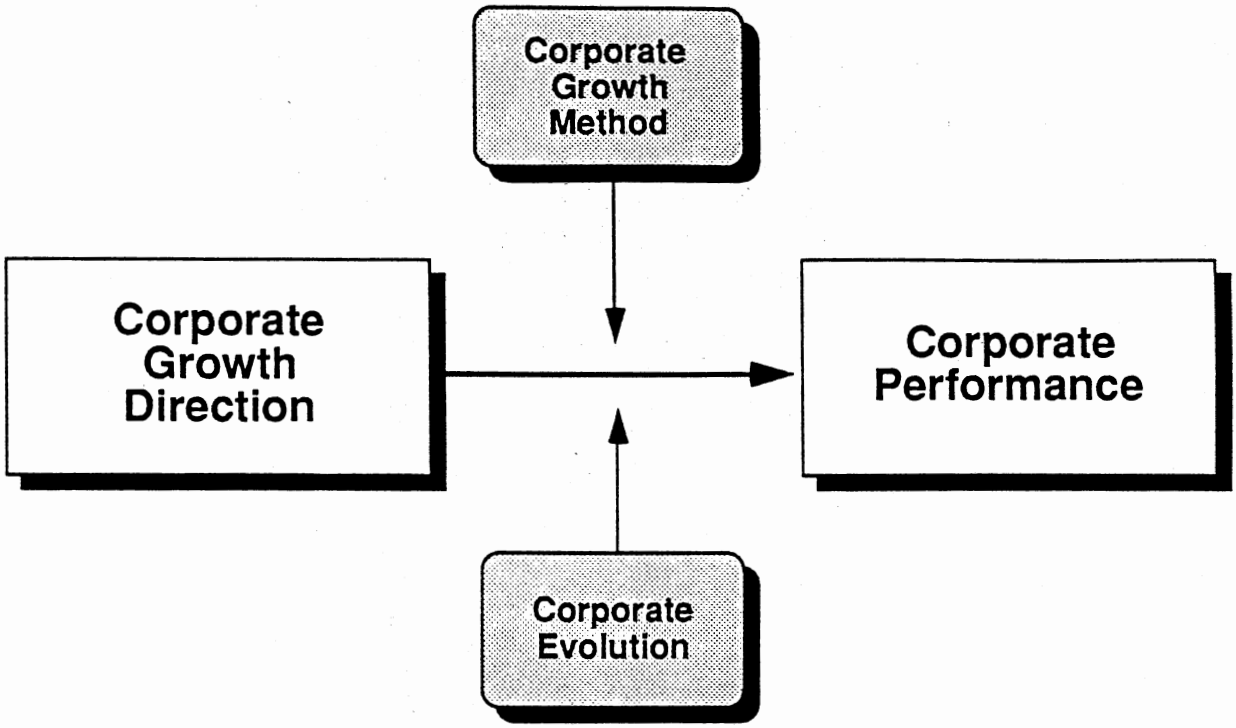

Figure 3. Model Of The Hypothesized Relationships

markets sharing a common distribution channel, salesforce, or other skills important to success (Porter 1985).

However, is the above relationship true regardless of the growth method employed? The findings on growth method performance indicate not. The performance of internal development and acquisition growth methods suggest that growth method choice is a key contingency in the corporate growth strategy/corporate performance relationship.

Like growth direction, relatedness is also key to the success of external methods of growth. Kitching (1967) found acquisitions seeking to create synergy by exploiting marketing and technological relatedness between two firms were less successful than conglomerate acquisitions of unrelated firms. Both Chatterjee (1986) and Lubatkin (1987) concluded from their work that acquisitions of related firms failed to create any synergistic effects and that it is best to exploit financial rather than operating synergies in growth moves through acquisition. The implication is that external methods of growth will increase in success as the newly added and existing product-markets decrease in relatedness.

Growth by way of internal methods will be more successful when the firm has skills and knowledge related to the new market being entered and when the new products "fit" with the firm's existing product focus (Cooper 1979; Cooper 1984). The data imply internal methods of growth will

increase in success as the newly added and existing product-markets increase in relatedness and synergy potential.

These conclusions are consistent with the Ansoff (1965) model of corporate growth strategy. Ansoff advocated the use of internal methods of growth when the potential for synergy between the firm and its new product-market activities was high. He suggested that internal development would be capable of exploiting these synergistic benefits where acquisition could not. When the potential for synergy was low because the new product-market activities were unrelated to existing businesses, Ansoff's model suggested external growth through acquisition as the proper method. Ansoff's model is in agreement with the method research that has followed it: internal methods are appropriate for related growth moves while external methods are appropriate for unrelated growth strategies.

If growth method like growth direction is contingent upon the relatedness of the firm's new and existing product-markets, then the performance of a given growth direction should vary according to the growth method used. For example, firms pursuing an intensive or related diversification growth direction through the use of internal development will outperform firms pursuing the same direction but with an external acquisition growth method. Likewise, an acquisition growth method is preferred with unrelated diversification growth directions as higher levels

of performance have been associated with conglomerate acquisitions.

Using the above logic, the first hypothesis and two specific hypothesized strategy performance relationships are stated as:

H1: Growth method is a moderator of the corporate growth direction/corporate performance relationship.

H1a: Among firms following an intensive or related diversification growth direction, internal growth method firms will outperform external growth method firms.

H1b: Among firms following a unrelated diversification growth direction, external growth method firms will outperform internal growth method firms.

Corporate evolution is also hypothesized to be a moderator of corporate growth direction strategy success. Firms in different stages of development have different capabilities. As a result, it has been proposed that as firms mature growth direction evolves from intensive to diversification.

Models of firm development have focused upon the evolution of organizational structures (Chandler 1962), management style (Steinmetz 1969; Churchill and Lewis 1983), and corporate growth strategies (McNichols 1983). Each of these firm characteristics are proposed to change over time as the firm develops into a larger, more complex organization.

Previous work is consistent in describing the pattern of evolution in growth strategies employed (Cooper 1979; McNichols 1983; Tyebjee, Bruno, and McIntyre 1983; McCann

and Cornelius 1987). Over time, growth direction evolves from intensive to diversification, first related and then unrelated diversification. Growth method evolves from an emphasis on internal development to reliance upon external methods such as acquisition.

Less mature firms early in evolution are young, relatively small, and dominated by the management control of the founder(s). The models imply that intensive growth within a market niche is the best growth strategy for these firms because of their capabilities. Limits in size may restrict these firms from competing on a broad scale with larger firms. Centralized management control by the founder exploits his or her knowledge of the market niche the firm was founded to serve.

Mature firms in late stages of evolution are older, relatively large, and controlled by a decentralized management function. Corporate evolution models view these firms as having the capability of growing in a diversificiation direction. The age and size of these firms indicates growth has been successful and diversification away from its original product-markets may be necessary to maintain growth. The decentralization of management structure allows for new business divisions and their resident resources to be incorporated into the overall organization.

In summary, stage of corporate evolution appears to be related to the performance of corporate growth strategies.

Models of corporate evolution propose that intensive growth direction is appropriate in the early stages of growth while a diversification direction should be reserved for more mature firms. Models of corporate evolution suggest the following hypothesis and specific hypothesized strategy performance relationships:

H2: A firm's stage of corporate evolution is a moderator of the corporate growth direction/ corporate performance relationship.

H2a: Among firms pursuing an intensive growth direction, less mature firms will outperform mature companies.

H2b: Among firms pursuing a diversification growth direction, mature firms will outperform less mature firms.

Construct Measurement

The above hypotheses necessitate the measurement of four constructs: corporate growth direction, corporate growth method, stage of corporate evolution, and corporate performance. The measurement of each of these constructs is described in this section and the measures summarized in Table X.

Corporate growth strategy constructs have typically been measured using nominal scales (i.e. Rumelt 1974; Varadarajan 1986). Venkatraman and Grant (1986) note that categorical measures are limited in their discriminatory power and while helpful in identifying across-group differences, provide little measurement of within-group differences. Varadarajan (1986) used two continuous measures to place firms into strategy categories. This

study will utilize the same two measures without first reducing them to nominal data.

Corporate Growth Direction

Past research indicates growth direction has both an extent of diversification and a relatedness of product-markets dimension. It has been suggested that the earliest research in corporate growth direction failed to find any relationship with performance because early measures did not incorporate these two dimensions. Both are measured in this study.

Extent of diversification refers to a firm's commitment to diversification. As described in Chapter Two, it was in the past captured by simple counts of the number of SIC categories in which a firm operated. Rumelt's (1974) research established the importance of product relatedness to measuring the performance of corporate growth strategies. It refers to the similarity of the product-markets in which the firm operates. Only diversification into related areas has been found to be successful (Rumelt 1974; Palepu 1985; Varadarajan 1986).

TABLE X

CONSTRUCT MEASURES

Construct/Dimensions	Measure
Corporate Growth Direction	
Extent of Diversification	BSD = number of different two-digit SIC categories in which the firm simultaneously operates.
Product Relatedness	MNSD = number of different four-digit SIC categories in which the firm simultaneously operates divided by the number of two-digit categories.
Corporate Growth Method	
Number of Acquisitions	NACQ = number of acquisitions of a majority interest in firms completed during 1982-1986.
Sales from Acquisitions	RAPCT = total revenues of acquired firms expressed as a percentage of the firm's latest net sales.
Corporate Evolution	
Firm Age	AGE = number of years since the founding of the firm.
Firm Size	NEMP = number of employees.
Ownership	PCTSHR = percentage of outstanding shares of stock held by directors or officers.

TABLE X (Continued)

Construct/Dimensions	Measure
Corporate Performance	
Growth	ANSGROW = five-year average annual change in net sales.
	EPSGROW = five-year average annual change in earnings per share.
Profitability	ROS = five-year average annual return-on-sales.
	ROIC = three-year average annual return-on-invested-capital.

Where,

5-year average annual change in net sales and 5-year average annual change in earnings per share (EPS) are calculated as the average of:

$$\frac{(X_{t+1} - X_t)}{X_t}$$

where X_t is the annual net sales or EPS for year t.

5-year average annual return on sales is calculated as the average of:

$$\frac{\text{(after-tax net income in year t)}}{\text{(net sales in year t)}}$$

3-year average annual return on invested capital is calculated as the average of:

$$\frac{\text{(after-tax net income in year t)}}{\text{(shareholders' equity + long term debt + noncurrent capital leases in year t)}}$$

Growth direction will be measured using Standard Industrial Classification (SIC) data. Although criticized by Rumelt (1974) as unable to capture the essence of a growth direction, subsequent empirical work has highlighted the value of using SIC data. Montgomery (1982) found a high level of agreement between Rumelt's qualitative measurement of strategy and an SIC-based approach. Using different SIC-based measures, both Palepu (1985) and Varadarajan (1986) found significant growth direction strategy/corporate performance relationships consistent with Rumelt's findings. Overall, it appears SIC-based measures provide a widely accessible and accepted alternative to Rumelt's laborious and qualitative approach and are quite appropriate for large sample, cross-sectional research (Montgomery 1982).

The SIC framework is a standardized numerical coding system developed for classifying all types of economic activity within the economy. The numeric codes assigned to describe a firm's business activities are based on the primary activities of each of a firm's plants or establishments. The SIC system is maintained by the U.S. Office of Management and Budget.

The coding system is such that the longer the code, the more detailed the description of a firm's activities. For example an SIC of 26 indicates a firm operating in the processed paper industry whereas an SIC of 2654 indicates manufacture of one product within that industry, sanitary paper food containers.

The study will employ Varadarajan's SIC-based measures of growth direction. His BSD and MNSD measures capture both diversification extent and product relatedness. They are superior to Rumelt's measures in ease and objectivity of calculation because of their use of SIC category counts. Their application has resulted in conclusions consistent with Rumelt.

BSD captures primarily the extent of diversification. It is the number of different two-digit SIC industries in which a firm does business and may range from one to seven as reported in the database to be used in this research. A high score indicates a firm highly diversified. MNSD primarily captures the relatedness of diversification. It is the average number of four-digit SIC areas within each two-digit SIC industry in which the firm operates. High values associated with this indicator reflect a firm diversifying into related product-markets. Low scores on both BSD and MNSD indicate a firm utilizing an intensive growth direction while large scores reflect a diversification direction.

An important issue in the measurement of growth direction using SIC data is the choice between continuous or categorical measures. Varadarajan (1986) used the two continuous SIC-based measures, BSD and MNSD, to put firms into four growth direction strategy categories. Before arbitrarily reducing continuous measures to categorical, multiple regression will be used to identify where

continuous or categorical measures provide the best description of variation in firm performance.

Corporate Growth Method

It is proposed that growth method is a significant contingency of corporate growth strategy. The conceptualization of growth method necessitates measuring the firm's growth method activity over time and inferring the firm's reliance on internal or external resources for growth. Previous research with similar objectives have taken three different approaches to this measurement task. First, firms have been a priori placed into growth method categories. The work of Cooper (1979; 1982; 1984) is indicative of this approach. He studied firms described as "previously known to be active in internal development."

The second measurement approach attempts to identify each diversification move and its corresponding growth method employed. Lamont and Anderson (1985) and Porter (1987) employed this course which results in a ratio of the number of times a specific growth method (internal or external) was used to the total number of diversification moves.

A third approach, and the one to be used in this study, measures a firm's growth method by examining its use of acquisitions during the study period. This measurement approach is based on the premise that the presence of acquisition activity by a firm during a specific time period

indicates the use of an acquisition growth method strategy. The absence of acquisitions indicates the firm is utilizing an internal development growth method strategy. For example, McCann and Cornelius (1987) categorized firms as acquirers or non-acquirers in reaching the conclusion that a significant positive relationship existed between firm stage of development and use of acquisitions.

Growth method will be measured here as the number of acquisitions completed by the firm during the five-year study period of 1982-86 (NACQ). A potential bias arises from the unusual acquisition activity of these years. Acquisition activity may be overstated because some firms which would have avoided acquisition as a growth method during other time periods, joined the trend toward using acquisitions during 1982-86. Only those acquisitions in which the firm acquires a majority interest in the acquired business will be included. Zero NACQ values will indicate internal methods of growth, increasing NACQ values will indicate increasing usage of external resources for growth.

Another measure of growth method will focus upon the significance of the firm's acquisitions to its current performance (RAPCT). RAPCT is calculated as the total sales volume acquired expressed as a percentage of the firm's current sales volume. If during the previous five years the firm has acquired businesses with a combined sales volume of $10 million and this figure represents 75 percent of the

firm's current sales, the MS score of .75 indicates an acquisition growth method to be the primary mode of growth.

In summary, this measure of growth method follows from the conceptualization of growth method choice as a unidimensional continuum of internal to external. With internal development at the internal end of the continuum and acquisition at the other extreme, collaborative ventures are a growth method that fall toward the middle of this continuum. Due to the fact that information on many collaborative ventures is unavailable and that the Porter (1987) findings indicate such ventures account for a small percentage of all growth methods used, collaborative ventures are not examined in this research. Instead, the focus is upon the two extremes of the unidimensional continuum with lack of acquisition activity interpreted as a internal growth method and presence of acquisition activity as an external growth method.

Corporate Evolution

A review of conceptual work on the evolution of a firm indicates a relationship may exist between the stage of a firm's development and its growth strategy. It has been proposed that as a firm matures, growth direction changes from intensive to diversification and growth method from internal to external. This may reflect changing capabilities of a corporation over time and therefore the success of a given corporate growth strategy may be

contingent upon the stage of corporate evolution characterizing the firm.

Previous conceptualizations and empirical examinations of corporate evolution indicate three major dimensions of a firm's evolution: size, management structure, and age. Each of these is measured in this study.

Firm development has been defined in terms of size operationalized as number of employees or value of total assets (Steinmetz 1969; Grinyer and Yasai-Ardekani 1981). Number of employees (NEMP) will be used as the measure of the size dimension of corporate evolution here. As the growth firm evolves, number of employees can be expected to increase.

Several have proposed that a firm grows more organizationally complex as it matures (Steinmetz 1969; Churchill and Lewis 1983). This may be expressed in terms of organizational structure (Chandler 1962) or bureaucracy (Grinyer and Yasai-Ardekani 1981) or management style (Churchill and Lewis 1983). A process that reflects all of these is the dilution of the role of the venture's founder and the changing ownership of the firm (Churchill and Lewis 1983). As the corporation grows, the entrepreneur who once was synonymous with the firm becomes a smaller part of the overall organization as owner control is replaced by a centralized and then decentralized bureaucracy. Where once the founder was the sole owner of the firm, as the firm evolves stock is increasingly purchased by other major

officers in the firm and then finally by many investors outside the firm's management.

One measure of this dimension is the percentage of a firm's outstanding shares owned by the firm's officers and directors (PCTSHR). The total number of shares of common stock held by the officers and directors of the company is extracted from the firm's latest proxy statement and reported by Disclosure Inc. In the early stages of evolution, PCTSHR will be large as ownership is controlled by a very few principals. However as the firm matures, continued growth means increasing reliance on public sources of funds and a dilution of management's overall share of ownership. PCTSHR is therefore an inverse measure of stage of corporate evolution with higher scores indicating a less mature firm.

Firm age is also an important dimension and common measure of corporate evolution (Churchill and Lewis 1983; McCann and Cornelius 1987). Models of corporate evolution suggest stage of evolution is indicated by the passage of time since the firm's inception. Firm age (AGE) will be measured here by calculating the number of years since the original founding of the firm (AGE).

Corporate Performance

The focus of this empirical study is the performance implications of choosing a particular growth strategy. Two dimensions of corporate performance are assessed: growth and

profitability. Sales growth, earnings per share growth, return on sales, and return on invested capital are the four measures of these two dimensions employed in this research.

Average annual change in sales (ANSGROW) and average annual change in earnings per share (EPSGROW) are two indicants of the growth dimension of corporate performance. These were chosen because of their importance from a systems definition of organizational effectiveness. Sales growth is an intuitive indicator of corporate growth strategy performance and a logical measure of the firm's effectiveness in satisfying its customer constituency. Earnings per share growth is an important measure for the firm's investor constituencies. In addition, both of these measures provide a basis for comparing previous research in this field (Rumelt 1974; Varadarajan 1986).

Return on sales (ROS) and return on invested capital (ROIC) are two measures of corporate profitability utilized in this study. Return on sales is preferred to another common measure of return, return on equity, because of a potential bias that may occur when comparing performance across firms with different acquisition records (Palepu 1985). Return on invested capital is preferred to the more traditional return on total capital measure because it controls for differences in financial structure across industries (Montgomery 1985). Both PPS and PPC also provide a basis for comparing results of this research to other studies (Rumelt 1974; Palepu 1985).

The performance measures will be calculated using five-year averages based upon the firm's most current financial data. The only exception is return on invested capital which due to data limitations is calculated using a three-year average. This is done to capture the long-run dimension of strategy performance and also to minimize the influence of short term economic trends.

Research Design

The research plan designed to test the hypotheses is presented in three sections. First, the sampling plan is presented. Next, data collection is described. Finally, steps in the analysis of data necessary to test the hypotheses are developed.

Sampling Plan

A stratified random sampling plan is employed with the Disclosure, Inc. compilation of over 12,000 public corporations serving as the sampling frame. The sample consists of 400 firms whose primary business activity is manufacturing. The manufacturing firms were stratified before random selection of a sample so as to achieve variation in the size of the firm, a key measure of stage in corporate evolution.

Disclosure, Inc. compiles 10-K and annual report data for over 12,000 firms quarterly in an optical disk database known as Compact Disclosure. To be included, a firm must be

public with at least 500 shareholders and have filed a 10-K report with the Securities and Exchange Commission in the last 18 months. Therefore, the sampling frame includes firms characteristic of Cooper's (1979) highly growth-oriented firm type. In contrast to "mom and pop" type businesses, these are firms taken public to finance their aggressive pursuit of growth.

The sampling plan follows four steps:

1. Only those firms whose primary business activity is in manufacturing are selected from the sampling frame. The Disclosure database classifies the primary SIC operation of each firm. This is the product area contributing the most to net sales. Firms with a primary SIC between 2000 and 3999 are selected as these codes represent the manufacturing sector of the SIC coding system. According to the latest version of the Disclosure database (May 1988), approximately 3,500 firms have primary operations in manufacturing.

The sample is limited to manufacturing firms for two practical reasons. First, past studies of growth strategy have almost exclusively focused upon manufacturers and the sample selected here will facilitate comparision with these past studies. Secondly, the SIC-based measure of growth direction may be inappropriate for non-manufacturing firms. The structure of the SIC framework is such that the coding is more elaborate and detailed for manufacturers relative to service firms. Therefore, an SIC-based measure may not

capture the extent or relatedness of diversification in a service firm.

2. The resulting set of approximately 3,500 manufacturing firms are then stratified according to number of employees. Number of employees was chosen as the criteria to insure variation in corporate evolution stage, a key variable in the analysis. Number of employees, the most often used indicator of firm development, is used to form ten strata.

3. Finally, forty firms are chosen at random from each of the ten number of employees strata. The resulting total sample of 400 firms is judged to be more than adequate for proper statistical tests of the three main hypotheses and the group analysis needed for the corresponding propositions.

Data Collection

Data collection involves the assembling of information from three secondary data sources. As has been demonstrated in studies within industrial organization economics (Berry 1975), management (Palepu 1985), and marketing (Varadarajan 1986), secondary data sources are available for the measurement of all constructs of interest here. Use of such sources increases the reliability of measurement while eliminating many of the problems arising from primary data collection in strategy research including low response to

mail surveys and identification of proper informants within each organization.

The main source of data is the firm's own 10-K documents as reported by Disclosure, Inc. These reports are filed annually and prepared according to standards set by the Securities and Exchange Commission and the Financial Accounting Standards Board. Disclosure compiles the 10-K data for over 12,000 public firms and makes these data available on compact disk for on-line search and inquiry. To the author's knowledge, this will be the first research using this new secondary data source.

Compact Disclosure is used to measure corporate growth direction, corporate evolution, and corporate performance. Firm records compiled by Disclosure and stored on compact disk contains resume, textual, financial, and ownership information on public firms. Only SIC operations contributing 10 percent or more of total firm sales are listed up to a maximum of seven per firm. SIC information is provided to Disclosure by Dun and Bradstreet which annually asks 50,000 U.S. firms to classify their operations by four-digit SIC category. In addition, each record contains number of employees and the distribution of outstanding common stock ownership. Performance data for growth and profitability are reported for the previous five-year period.

Two other sources of secondary data are utilized. Each year Mergers and Acquisitions publishes an almanac issue

describing all acquisitions valued at $1 million or more completed during the last year. Brief information is given for most acquisitions including details on the two firms involved and how the acquisition was financed. This source allows the measurement of each firm's growth method over the five-year study period. Finally, Ward's Directory is used to determine the year in which sampled firms were founded. Age is a measure of corporate evolution.

The data collection process is:

1. Measurement of growth direction, number of employees, corporate ownership, and corporate performance for each firm. Data needed for these measures is extracted from the Disclosure database for each of the 400 firms sampled. This data is reformatted and input into a new database built for use in this research.

2. Measurement of growth method for each firm. The 1982-86 almanac issues of Mergers and Acquisitions will be surveyed to identify acquisition activity by any of the sampled firms. The number of acquisitions for each firm will be counted and the latest annual sales of each acquired firm will be summed.

3. Identification of firm age for each firm. Ward's Directory will be consulted to determine the year in which each of the 400 firms were founded.

Data Analysis

Analysis of the data will be conducted in two major stages. In stage one, moderator variables will be identified using the Sharma, Durand, and Gur-Arie paradigm. This will involve the examination of growth method as a possible moderator of the growth direction/corporate performance relationship, then likewise the examination of corporate evolution. Also, stage one analysis will explore the joint moderating influence of growth method and corporate evolution. Step one analysis will result in the testing of Hypotheses 1, 2 and 3.

Step two of the analysis is the continued examination of each variable identified as a moderator in step one. It involves testing for significant differences in mean performance levels across firms grouped by growth strategy. If H1 is accepted, then firms will be grouped according to growth direction and method strategy and H1a-b will be tested using one-way ANOVA and planned orthogonal contrasts of the mean performance levels. The same procedure will follow for corporate evolution (H2a-b) and the joint moderators (H3a-d).

Identification of Moderator Variables. Each hypothesis will be tested using moderated regression analysis (MRA). MRA is preferrable to other techniques for identifying moderator variables because it does not require a continuous variable be reduced to nominal data and because it results

in a specific description of the type of moderating relationship.

A moderator variable has been defined as one which systematically modifies either the form and/or the strength of the relationship between a predictor and a criterion variable. A typology of moderators labels "homologizer" moderators as variables that influence the strength but not the form of a relationship while "quasi" and "pure" moderators influence the form of a relationship (Sharma, Durand, and Gur-Arie 1981).

The most common approach to identifying moderator variables has been subgroup analysis. The sample is divided into subgroups on the basis of the potential moderator and a separate regression is run on each subgroup. The predictive validity coefficients from each regresssion are compared and if significantly different the variable is identified as a moderator.

The subgroup analysis described above has two limitations. First, it will require artificially transforming a continuous variable into a categorical one to accomplish the subgrouping. Second, it does not distinguish between moderators of strength or form. Zedeck (1971) offered MRA as an alternative moderator identification technique.

Sharma, Durand, and Gur-Arie (1981) combined these two approaches into a four-step process for the explicit idenfication of moderator variables and their type of

influence (see Figure 4). This framework will guide testing of each of the hypotheses in this study.

In the tests, the basic regression function is:

Regression 1 : $y = a + b_1GE + b_2GR$

where,
y = corporate performance
GE = extent of diversification
GR = relatedness of products

Regression 1 represents the basic growth direction/ performance relationship established empirically in past research. Both extent and relatedness dimensions have been found to be important to the relationship and both are included in the basic model.

In tests one and two, the first step is to compare Regression 1 with three other regression functions in which the potential moderator variable is introduced first as another predictor variable and then as an interaction term (e.g. Gur-Arie, Durand, and Sharma 1979). As an example, test one would begin with the comparison of four regressions:

Regression 1 : $ANSGROW = a + b_1BSD + b_2MNSD$
Regression 2 : $ANSGROW = a + b1BSD + b2MNSD + b3NACQ$
Regression 3 : $ANSGROW = a + b1BSD + b2MNSD + b3NACQ + b4BSDxNACQ$
Regression 4 : $ANSGROW = a + b1BSD + b2MNSD + b3NACQ + b5MNSDxNACQ$

where,
ANSGROW = average annual sales growth rate
BSD = extent of diversification
MNSD = relatedness of products
NACQ = number of acquisitions
BSDxNACQ = extent, acquisitions interaction
MNSDxNACQ = relatedness, acquisitions interaction

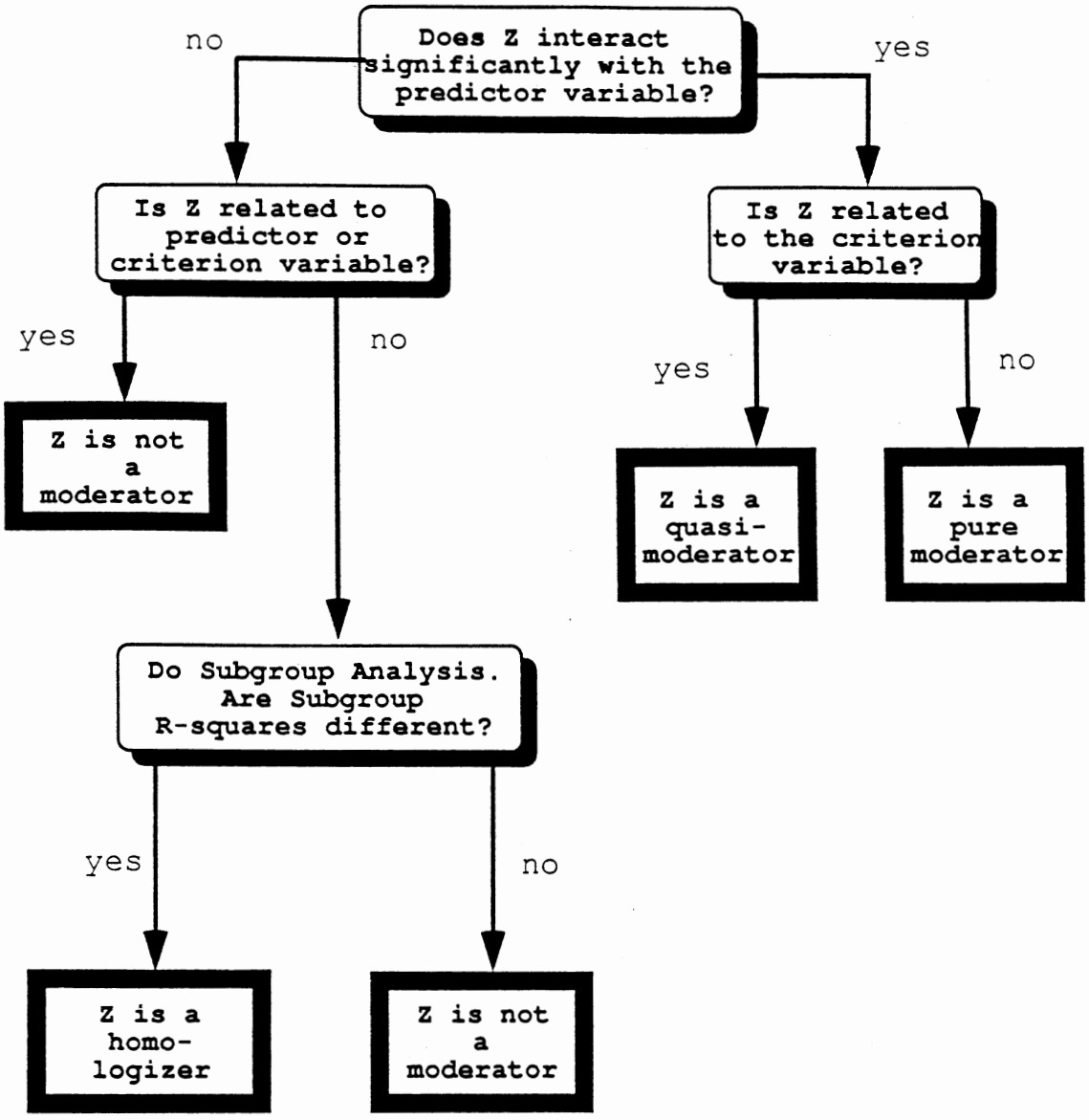

Figure 4. A Framework for Identifying Moderator Variables

Using the Sharma, Durand, and Gur-Arie approach outlined in Figure 4, hypothesis one for sales growth as the criterion and number of acquisitions (NACQ) as the moderator can be accepted or rejected. If Regression 3 or 4 is significantly different than Regression 1 then hypothesis one is accepted, NACQ is a moderator. Subsequent analysis is needed to determine the type of moderator. If Regression 3 and 4 is not different than Regression 1 and Regression 2 is greater than Regression 1, hypothesis one is rejected, NACQ is not a moderator. If Regression 3 and 4 is not different than Regression 1 and Regression 2 is not greater than Regression 1, then NACQ may or may not be a moderator and subgroup analysis is needed.

To fully test hypothesis one, test one will be run using each of the four performance measures as criterions (variables ANSGROW, EPSGROW, ROS, ROIC) and each of the two growth method measures as moderators (variables NACQ and RAPCT) for a total of eight separate analyses.

The above is a brief outline of the procedure involved in conducting test one. Test two will be identical except for its focus upon stage of evolution as a moderator.

In conclusion, two tests each following the Sharma, Durand, and Gur-Arie paradigm for identification of moderator variables are employed to accept or reject H1, and H2. The result will be an explicit identification of the relationships and therefore a more precise understanding of

the performance implications of corporate growth strategy choice.

Comparison of Mean Performance Levels. Step one of the analysis concludes with the identification of growth method and corporate evolution as moderator variables or other. If they do moderate the growth direction/corporate performance relationship, the next step is to describe the nature of the moderating effect.

The relationships expected are described in H1a, H1b, H2a, H2b, and H3a-d. They are expressed in terms of mean performance levels for firms grouped by the nature of their growth direction, growth method, and corporate evolution stage. Therefore, this step in the analysis requires (1) the grouping of firms by strategy, and (2) an ANOVA approach to test for significant differences in performance across all groups and those groups specified in the hypotheses.

For example, if H1 is accepted and growth method can be considered a moderator, H1a and H1b require firms to grouped by their growth direction and growth method strategy. Using the Varadarajan (1986) framework and a simple mean split of the NACQ measure (number of acquisitions), firms may be placed into six groups:

1. intensive direction / internal method
2. intensive direction / external method
3. related diversification direction / internal method
4. related diversification direction / external method
5. unrelated diversification direction / internal method
6. unrelated diversification direction / external method

Mean values for each of the performance measures are calculated for each group (mean1-6) and a one-way ANOVA for each criterion variable is calculated. Next, the two hypotheses call for three mean comparisons (mean1/mean2, mean3/mean4, mean5/mean6) for each ANOVA that represent orthogonal contrasts. The hypotheses are accepted if the contrasts reveal significant differences in the direction proposed.

In conclusion, Chapter Three provides a plan for systematically elaborating upon the growth direction/ corporate performance relationship. Following from the relevant literature described in Chapter Two, hypotheses specifically describing the relationship were developed. Finally, a research methodology beginning with construct measurement and concluding with statistical analysis describes the testing of each hypothesized relationship.

CHAPTER IV

RESEARCH ANALYSIS AND RESULTS

Introduction

In this chapter the analysis of data associated with each research question is described. Section one presents the database generated in the research. The sampling plan was successful in generating a broad cross-section of manufacturing firms of various age, size, and growth strategy. Following the descriptive analysis, the testing of each hypothesized relationsip is described. The results provide partial support for classifying both growth method and firm age as moderators of growth direction strategy performance.

Descriptive Analysis

This chapter begins with a description of the database generated by this research. First, the selection of firms and the provision for missing data and outliers are described. Second, the characteristics of sampled firms are examined. The next section presents summary statistics of the distribution of relevant construct measures collected for each firm. Finally descriptive analysis concludes with

an examination of the growth direction strategy/corporate performance relationship identified in this study.

Sample Determination

The sampling plan resulted in the random selection of 414 firms from the Disclosure database. Manufacturing firms in the database were identified and stratified according to number of employees. Firms were then randomly selected from each of the strata.

Initial analysis indicated that the majority of sampled firms were missing data needed for one or more growth direction, growth method, corporate evolution, or corporate performance measures. For only 187 firms or 45 percent was complete information available.

Closer inspection indicated that three measures could not be calculated in over 50 percent of all cases (earnings per share growth, revenue acquired, and percentage of stock held by officers). Because of potential bias associated with such large numbers of missing data points, these three variables were dropped from further analysis. This still left for analysis three measures of corporate performance, one measure of growth method, and two measures of corporate evolution. Dropping the three often-missing measures, raised the number of firms with complete data to 302 or approximately 75 percent of the original sample.

In testing each of the hypothesis, relevant missing data points and any aberrant outlying points were deleted

from the analysis. Therefore the sample size ranged from 395 to 317 depending upon the variables being examined. For example, moderated regression analysis of number of employees as a moderator of the growth strategy/return on sales relationship proceeded with 395 firms following the deletion of firms missing employee or sales return information and the deletion of firms identified as outlier response values.

To identify any aberrant response values or outliers that might distort examination of the growth strategy direction and corporate performance association, an outlier identification technique previously applied in marketing research was employed (Mahajan, Sharma, and Wind 1984). Cook's distance statistic indicates the influence of an observation by measuring the change in regression coefficents that would occur if the case was omitted (Rousseeuw and Leroy 1987). As suggested by Mahajan, Sharma and Wind, any observation that moved regression coefficients beyond a 10 percent confidence region were identified as outliers. The analysis indicated that only eight firms significantly distorted the relationship between growth direction and each of the three performance measures.

Firm Characteristics

Previous growth strategy research has examined relatively homogenous firm samples. As noted in Chapter II, most studies have focused on only the largest firms such as

those included in the Fortune 500. One objective of this research was to examine a more heterogenous sample to determine the influence of firm development on growth strategy performance.

A description of the 302 firms with no missing data indicates that the sampling plan was successful in generating a cross-section of manufacturing firms at various stages of firm evolution. The sample consists of firms from each of the SIC manufacturing industries (see Table XI). No one industry dominates the sample with non-electrical machinery manufacturers being the largest at only 22 percent of the total. Very few firms fell into the miscellaneous category. The classifications in Table XI are based upon the firm's most important industrial activities in terms of contribution to overall sales.

The distribution of sales levels and firm ages indicates the sample of manufacturing firms are in various stages of size and development (see Table XII and Table XIII). Approximately one-half of the firms reported latest annual net sales of less that $50 million. Only 11 percent reported sales exceeding $1 billion. In comparison, it took sales of $455 million to make the 1988 Fortune 500 and 65 percent of that elite group had sales levels exceeding $1 billion (Fortune 1988). While most previous studies have focused exclusively upon Fortune 500-type firms, only 15 percent of the sample reported here would rank among the top 500 industrials.

TABLE XI

THE PRIMARY BUSINESSES OF FIRMS
REPORTED BY TWO-DIGIT SIC

SIC	Industry	Frequency	Percent
20	Food & Kindred Products	12	4.0
21	Tobacco Manufacturing	1	.0
22	Textile Mill Products	5	1.7
23	Fabric Apparels	8	2.6
24	Lumber & Wood Products	7	2.3
25	Furniture & Fixtures	6	2.0
26	Paper & Allied Products	10	3.3
27	Printing & Publishing	10	3.3
28	Chemicals	28	9.3
29	Petroleum Refining	4	1.3
30	Rubber & Miscellaneous Plastics	13	4.3
31	Leather & Leather Products	2	.7
32	Stone, Clay, Glass & Concrete	7	2.3
33	Primary Metals	9	3.0
34	Fabricated Metal Products	20	6.6
35	Machinery, except electrical	66	21.9
36	Electrical & Electronics	40	13.2
37	Transportation Equipment	12	4.0
38	Measuring, Analyzing Instruments	35	11.6
39	Miscellaneous Manufacturing	7	2.3
	TOTALS	302	100.0

The sample includes firms of varying age as well (see Table XIII). Approximately one-third of the sample is less than 20 years old while another one-third is over 50. In conclusion, variation in both sales level and age indicates the sample does, as was intended, consist of firms at different stages of corporate evolution.

TABLE XII

DISTRIBUTION OF FIRMS BY ANNUAL NET SALES

Latest Annual Net Sales ($ Mil)	Frequency	Percent
under 1	6	2.0
1 - 9.9	56	18.5
10 - 49.9	82	27.2
50 - 99.9	39	12.9
100 - 999.9	85	28.1
over 1,000	34	11.3
TOTALS	302	100.0

The Distributions of Measures

Examination of the distribution of each construct measure provides an enhanced description of the database. Table XIV presents five summary statistics on the two measures of growth direction (MNSD and BSD), one measure of growth method (NACQ), two measures of corporate evolution (AGE and NEMP), and three measures of corporate performance (ANSGROW, ROIC, and ROS). The measures are described in detail in Chapter III.

TABLE XIII

DISTRIBUTION OF FIRMS BY AGE

Firm Age (Years)	Frequency	Percent
under 10	35	11.6
10 - 19	56	18.5
20 - 49	118	39.1
50 - 99	72	23.8
over 100	21	7.0
TOTALS	302	100.0

The Varadarajan measures of diversification indicate that on average the sampled firms operate in relatively few four-digit SIC industries. Approximately 36 percent of the firms operated in just one four-digit industry and over one-half of the firms operated in two or less. The MNSD mean of 1.39 and BSD mean of 2.03 in Table XIV compare with 1.99 and 10.73 found among 223 of the largest U.S. firms (Varadarajan 1986). This difference is consistent with the premise that firms early in stage of development are less likely to be diversified. This sample of younger and smaller firms is expected to be earlier in stage of development and therefore should have a lesser extent of product diversification than those examined by Varadarajan (1986).

TABLE XIV

SUMMARY STATISTICS ON THE DISTRIBUTION OF GROWTH STRATEGY, EVOLUTION, AND PERFORMANCE VARIABLES

Variable	Mean/ Median	Std. Dev.	Minimum Value/ Maximum Value
Mean Narrow Spectrum Diversification (MNSD)	1.39 1.00	.71	1 6
Broad Spectrum Diversification (BSD)	2.03 2.00	1.23	1 6
Number of Acquisitions During 1982-86 (NACQ)	1.03 0	1.96	0 10
Firm Age (AGE)	41.43 30.00	32.58	2 157
Number of Employees (NEMP)	5,156 585	14,825	4 124,400
Annual Net Sales Growth Rate (ANSGROW)	23.19 11.67	46.56	-20 426
Return on Invested Capital (ROIC)	-.03 .05	.35	-2.8 1.2
Return on Sales (ROS)	-.03 .03	.22	-1.7 .37

The measure of growth method consisted of counting the number of businesses acquired by the firm over a five-year period (NACQ). The number ranged from 0 to 10. Although the sample mean is one acquisition, 62 percent of the firms had no acquisitions. The remaining 38 percent averaged nearly three acquisitions each during the period.

Firm age (AGE) and number of employees (NEMP) were examined as indicators of the firm's stage of corporate evolution. The mean age of the sample was 41 years with half the sample 30 years of age or less. A distribution of firm ages was given in Table XIII. The variance in firm ages was desired to allow contrast across firms of differing stage of development.

The sample frame was stratified according to number of employees and so the resulting variation in NEMP was expected. The mean workforce was over 5100 employees but half the sample employed 585 or less. Fifty-seven firms had less than 100 employees and approximately 33 percent of the sample employed 250 or fewer. At the opposite extreme, 121 firms or nearly 40 percent employed over 1000. Like AGE, variation in NEMP was desired so that firms of very different stage of evolution could be contrasted.

The broad variations in firm AGE and NEMP extended also to the three measures of corporate performance (ANSGROW, ROIC, and ROS). Mean levels of these indicate firms growing rapidly but not profitably. The large standard deviations however highlight the great range of performance levels encountered. The great majority of firms (85 percent) achieved positive sales growth rates over the previous five years. Nearly 60 percent achieved average annual growth rates that exceeded 10 percent.

The negative mean levels of ROIC and ROS are misleading. Only about one-third of the firms averaged

negative returns. A nearly equal proportion of firms had ROIC and ROS levels exceeding 10 percent.

Overall, the performance levels of this sample are characterized by higher mean growth rates and lower mean profitability rates than a sample of the most large and well-known firms (Varadarajan 1986). This finding is consistent with this sample being dominated by firms of less maturity. Models of corporate evolution would generally predict newer and less developed firms to achieve faster growth but poorer profitability than mature firms.

The Relationship of Growth Direction And Performance

As expected, a relationship was found between growth direction strategy and corporate performance. However, this relationship appears to be limited to the profitability and not growth dimensions of corporate performance.

As described in Chapter II, product diversification has been measured with both continuous and categorical indicators. Varadarajan (1986) calculated two continuous measures of growth direction (BSD and MNSD). He evaluated their properties as continuous measures before deciding to use them to form a categorical measure of diversification.

The same logic was followed in this analysis. First, BSD and MNSD were examined as continuous measures of growth direction. Both BSD and MNSD were significantly and positively correlated with both ROIC and ROS (see Table XV).

They were not significantly related to ANSGROW. In addition, a regression model with BSD and MNSD as predictors was fitted to explain variance in each of the three performance indicators: ANSGROW, ROIC, and ROS. For both profitability indicators, the regressions were significant (for ROIC: R^2=.05, F=7.42, p<.01; for ROS: R^2=.05, F=6.34, p<.01). Like the correlation results, regression analysis did not indicate a significant linear relationship between BSD and MNSD and ANSGROW (R^2=.01, F=1.02).

Like Varadarajan (1986), high/low mean splits of BSD and MNSD were used to put firms into four strategy categories (see Table XVI). This categorical measurement approach yielded results similar to the continuous measure. MANOVA indicated that corporate performance overall did vary across strategy groups (Wilks F=2.40, d.f.=9,721, p=.01). Univariate F tests for differences across strategy groups identified performance differences in ROIC (F=3.47, p=.02) and ROS (F=4.17, p=.01) but not ANSGROW (F=1.20, p=.31).

TABLE XV

CORRELATIONS OF GROWTH DIRECTION STRATEGY AND FIRM PERFORMANCE

	MNSD	BSD	ANS-GROW	ROIC	ROS
MNSD (p=)[1]	--				
BSD (p=)	-.02 (.35)	--			
ANSGROW (p=)	-.07 (.09)	.04 (.24)	--		
ROIC (p=)	.14 (.01)	.16 (.00)	.02 (.37)	--	
ROS (p=)	.13 (.01)	.19 (.00)	-.21 (.00)	.34 (.00)	--

n=302

[1] p values indicate coefficient t test significance

Table XVI summarizes results from the application of Varadarajan's diversification strategy measure to this larger, more heterogeneous sample. Varadarajan (1986) reported significant differences in profitability between related diversifiers (high MNSD/low BSD) and unrelated diversifiers (low MNSD/high BSD). However, this research indicates the significant performance difference is between intensive direction (low MNSD/ low BSD) and high diversification direction (high MNSD/ high BSD) firms. The

organizations operating in the fewest businesses had much lower mean ROIC and ROS levels than firms with the highest level of product diversification. This finding in consistent with diversification propositions developed by industrial organization scholars (Montgomery 1985).

Descriptive analysis of this more representative sample of manufacturers points to the need for elaboration of the Varadarajan (1986) findings. In that study, no examination of the continuous relationship of growth direction and performance was pursued. This analysis indicates such a relationship does in fact exist. Also, this analysis points to important differences in the strategy/performance relationship between samples of only the largest firms and this sample of firms of varying age and size. The next sections explore propositions that growth method and stage of corporate evolution are important contingencies in explaining the growth direction strategy/performance association.

TABLE XVI

FIRM PERFORMANCE VARIANCE ACROSS
GROWTH DIRECTION STRATEGY GROUPS

Performance Measure[1]	Strategy Categories[2]: Low MNSD Low BSD (n=149)	High MNSD Low BSD (n=67)	Low MNSD High BSD (n=48)	High MNSD High BSD (n=38)	ANOVA F
ROIC	-.09*	.02	.01	.07*	3.47 (p=.02)
ROS	-.07	.00	.01	.05	4.20 (p=.01)
ANSGROW	23.5	15.5	32.0	24.5	1.20 (p=.31)

MANOVA Results:
Wilks=.93
F=2.40
p=.01

[1]Cell entries are group means.
[2]Strategy categories defined using mean MNSD (1.4) and BSD (2.0).
(*) indicate significantly different means (Duncan, $p<.05$)

Examination of Growth Method as a Moderator of Growth Strategy Performance

A firm's strategic marketing choice of growth method was hypothesized to moderate the relationship of growth direction strategy and performance. It was proposed that the performance of intensive and related diversification direction strategies would be higher if an internal growth

method was employed. In contrast, an external growth method was expected to be more appropriate for unrelated diversifiers. Results support concluding that growth method moderates ROIC performance associated with growth direction.

Initially two indicators of growth method were proposed: number of acquisitions (NACQ) and percent of current sales from acquisitions (RAPCT). As described previously, missing data problems made use of sales acquired data suspect. Low NACQ scores indicated firms employing an internal growth direction, high NACQ scores characterized external method firms.

Product-moment correlations of growth direction, method, and performance variables identify several statistically significant correlations (see Table XVII). The correlations between NACQ and both profitability measures of performance (ROIC and ROS) were significant at $p<.10$. NACQ was not related to sales growth (ANSGROW). NACQ was also significantly correlated with both growth direction measures (BSD and MNSD).

TABLE XVII

CORRELATIONS OF GROWTH DIRECTION, METHOD, AND PERFORMANCE MEASURES

	NACQ	MNSD	BSD	ANS-GROW	ROIC	ROS
NACQ	--					
(p=)[1]						
MNSD	.16	--				
(p=)	(.00)					
BSD	.48	.01	--			
(p=)	(.00)	(.39)				
ANSGROW	-.03	-.10	-.01	--		
(p=)	(.29)	(.03)	(.45)			
ROIC	.08	.10	.11	.02	--	
(p=)	(.06)	(.02)	(.02)	(.37)		
ROS	.07	.09	.13	-.21	.34	--
(p=)	(.08)	(.03)	(.01)	(.00)	(.00)	

n=302

[1] p values indicate coefficent t-test significance

Given that growth method appeared to be related to both growth direction and performance individually, the Sharma, Durand, and Gur-Arie paradigm for identifying moderator variables was employed to examine any moderating influence NACQ may have on the growth direction/performance relationship. The procedure was repeated three times using each of the three measures of firm performance.

The moderator identification paradigm, described in Chapter III, initially examines three regression models to isolate variables that function as moderators of a linear relationship. This moderated regression analysis (MRA) constrasts regression model one (M1) including only growth direction indicators (BSD, MNSD) as predictors, regression model two (M2) in which the potential moderator variable is added (BSD, MNSD, NACQ), and regression model three (M3) in which interaction terms are also included (BSD, MNSD, NACQ, BSD*NACQ, MNSD*NACQ).

Table XVIII describes the three regression models for each of the three performance indicators. The table summarizes standardized beta coefficients resulting from each of the regressions and notation of t-test significance associated with each. In addition, the adjusted R^2, partial F, and full F statistic are reported as measures of the model's fit.

TABLE XVIII

RESULTS OF MODERATED REGRESSION ANALYSIS
WITH NACQ AS THE PROPOSED MODERATOR

Criterion:	ROIC			ROS			ANSGROW		
Model:	M1	M2	M3	M1	M2	M3	M1	M2	M3
BSD[1]	.10	.10	.09	.13	.13	.16	-.01	.00	.01
(p=)[2]	(.04)	(.09)	(.14)	(.01)	(.02)	(.01)	(.91)	(.99)	(.87)
MNSD	.10	.10	.11	.09	.09	.10	-.09	-.09	-.12
(p=)	(.04)	(.05)	(.08)	(.07)	(.07)	(.08)	(.06)	(.07)	(.05)
NACQ	*	.02	.01	*	.00	.37	*	-.01	-.10
(p=)		(.79)	(.96)		(.92)	(.16)		(.84)	(.68)
BSD x NACQ	*	*	.02	*	*	-.27	*	*	.00
(p=)			(.92)			(.13)			(.99)
MNSD x NACQ	*	*	-.02	*	*	-.15	*	*	.10
(p=)			(.91)			(.32)			(.50)
Partial F	*	.07	.02	*	.01	1.2	*	.04	.29
(p=)		(.79)	(.98)		(.92)	(.30)		(.84)	(.75)
R^2a	.02	.01	.01	.02	.02	.02	.00	.00	.00
F	4.3	2.9	1.7	5.0	3.3	2.5	1.8	1.2	.83
(p=)	(.01)	(.04)	(.13)	(.01)	(.02)	(.03)	(.17)	(.31)	(.53)
n		390			396			393	

[1] Table entries are standardized beta coefficients.
[2] p values are associated with t-test significance.

The first step in the Sharma, Durand, and Gur-Arie paradigm is to determine if NACQ interacts with the growth direction strategy variables, MNSD and BSD. In Model 3, the

BSD*NACQ and MNSD*NACQ interaction terms were not significantly different than zero for each of the three performance criterion variables.

In interpreting the moderated regression analysis, the influence of multicollinearity is relevant. NACQ is significantly correlated to both BSD ($r=.16$, $p<.01$) and MNSD ($r=.48$, $p<.01$). Such multicollinear relationships may mask the explanatory importance of a variable and make interpretation of an individual beta coefficient suspect (Churchill 1987). Multicollinearity, however, does not influence evaluation of a regression model's fit. Therefore, the partial F statistic and adjusted coefficent of predictive validity (R^2) for each MRA is noted in Table XVIII. These statistics indicate the model with interaction terms included (M3) did not significantly fit the data better than the regression model absent of the interactions (M2).

Given no interaction, the next step is determining if NACQ is a significant predictor of performance. In model 2, the NACQ beta coefficient is not significantly different than zero. If NACQ does not interact with growth direction and is also not a predictor of performance, the moderator identification paradigm prescribes subgroup analysis to determine any NACQ moderating influence that may result through the regression error term.

Table XIX summarizes subgroup analysis results. Firms were placed into two groups according to their NACQ. Those

firms with no acquisitions during the five-year study period were grouped as internal growth method firms. Firms with one or more acquisitions were grouped as external growth method organizations. The basic growth direction regression model 1 (BSD, MNSD) was fitted to each of the subgroups for each criterion measure. The beta coefficients and fit of each model is described in Table XIX.

TABLE XIX

RESULTS OF SUBGROUP REGRESSION ANALYSIS
WITH NACQ AS THE PROPOSED MODERATOR

Criterion:	ROIC		ROS		ANSGROW	
Method[1]:	Int	Ext	Int	Ext	Int	Ext
BSD[2]	.01	.28	.11	.14	.02	-.01
(p=)[3]	(.84)	(.00)	(.07)	(.11)	(.78)	(.90)
MNSD	.10	.18	.08	.13	-.13	-.04
(p=)	(.14)	(.04)	(.20)	(.14)	(.03)	(.66)
R^2	.01	.09	.02	.03	.02	.00
F	1.1	6.6	2.7	2.0	2.3	.10
(p=)	(.32)	(.00)	(.07)	(.13)	(.10)	(.91)
n	260	137	258	138	256	137

[1]Growth method subgroups are Internal (Int) where NACQ=0 and External (Ext) where NACQ>0.
[2]Table entries are standardized beta coefficients.
[3]p values are associated with coefficient t-test significance.

Subgroup analysis as a step in the moderator identification paradigm attempts to identify homologizer moderators. These variables modify the strength but not the form of the relationship. Such moderators are identified by comparing the predictive validity coefficient across subgroups. Described in Table XIX, the regressions of growth direction and ROIC generate very different R^2 values across NACQ subgroups. Growth direction strategy explains nine percent of the ROIC variance for external method firms but only 1 percent of the internal method group.

In conclusion, the Sharma, Durand, and Gur-Arie procedure yields support for identifying NACQ as a moderator of the growth direction strategy and ROIC relationship. As a homologizer moderator, the strength of the relationship is expected to vary across subgroups. This can be seen by grouping firms into categories by growth direction and method (see Table XX). ANOVA results indicate the growth direction strategy categorization explains more variance among external method firms as the F statistic is significant for that subgroup but not for internal method firms.

Examination of group means across growth methods also indicates some evidence of growth direction/method interation as well. For example among firms employing a related diversification direction, 45 did so by an internal growth method while 34 used acquisitions to achieve growth. Related diversifiers using an internal method generated an

average ROIC of .08 while related diversifiers using an external method performed considerably poorer with a mean ROIC of -.01.

TABLE XX

DIFFERENCES IN ROIC LEVEL ACROSS GROWTH METHOD STRATEGIES

Growth Method	Strategy Categories[1] Low MNSD Low BSD	High MNSD Low BSD	Low MNSD High BSD	High MNSD High BSD	ANOVA F[2]
Internal	-.09	.08	-.04	-.04	1.02
(n=)	(172)	(45)	(24)	(10)	(p=.38)
External	-.17	-.01	.03	.11	3.22
(n=)	(41)	(34)	(32)	(32)	(p=.02)

[1] cell entries are mean ROIC
[2] p value indicates significance of ANOVA F for method group

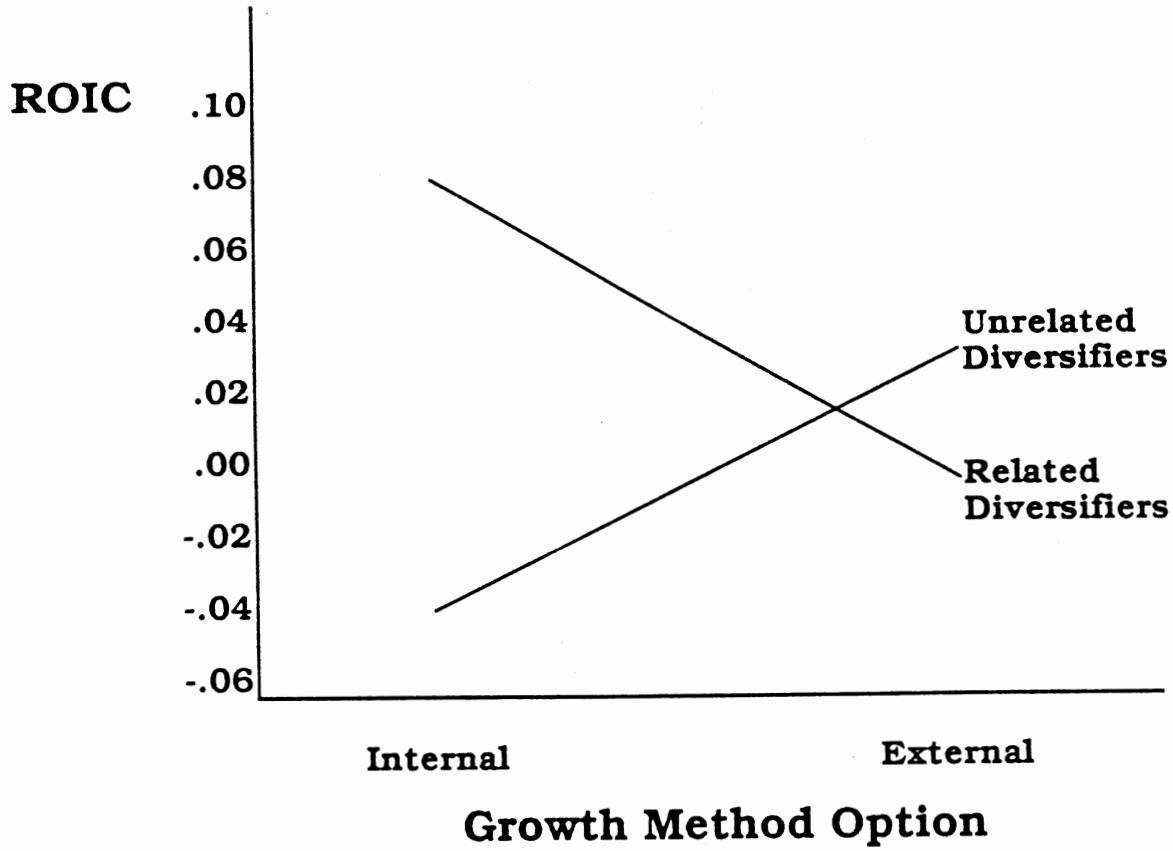

Figure 5. Performance Across Growth Method Subgroups

The reverse relationship was found for those firms utilizing an unrelated diversification direction strategy. These firms performed better when an external method was employed. Figure 6 illustrates this interaction. The relationships found are the sames as those hypothesized in hypothesis one. Therefore, the hypothesis is supported for ROIC performance only.

Examination of growth method as a moderator indicates the ROIC associated with a growth direction strategy is contingent upon the growth method utilized. Firms that diversify into unrelated businesses benefit from acquiring other firms while intensive and related diversification direction firms performed better when they utilized only internal resources to achieve growth.

Examination of Corporate Evolution as a Moderator of Growth Strategy Performance

Hypothesis two proposed that the stage of a firm's corporate evolution would moderate the growth strategy/ performance relationship. Two indicators of corporate evolution were used: firm age (AGE) and number of employees (NEMP). Each was tested separately following the moderator identification paradigm applied in the previous section. Firm age was found to moderate the growth direction/ROIC relationship. NEMP did not function as a moderator. Partially supported was the proposition that mature firms would be most successful with a diversification

direction with the opposite being true for the least mature firms.

TABLE XXI

CORRELATIONS OF GROWTH DIRECTION, EVOLUTION AND PERFORMANCE MEASURES

	AGE	MNSD	BSD	ANS-GROW	ROIC	ROS
AGE	--					
(p=)[1]						
MNSD	.33	--				
(p=)	(.00)					
BSD	.33	-.02	--			
(p=)	(.00)	(.37)				
ANSGROW	-.15	-.08	.03	--		
(p=)	(.00)	(.09)	(.25)			
ROIC	.23	.15	.17	.02	--	
(p=)	(.00)	(.00)	(.00)	(.37)		
ROS	.22	.11	.15	-.21	.34	--
(p=)	(.00)	(.02)	(.00)	(.00)	(.00)	

[1] p values indicate coefficient t test significance

AGE As a Moderator

Firm age was significantly correlated with ROIC, ROS, and ANSGROW (see Table XXI). Overall, profitability

increased with age while sales growth rate slowed. Age was also significantly related to growth direction. Both related and unrelated diversification increased with the age of the firm.

Examination of firm age as a potential moderator began with moderated regession analysis. The results of the three regressions associated with each criterion are detailed in Table XXII. AGE was found to interact significantly with growth direction strategy in regression model 3 for ROIC and ROS. When added to the regression of ROIC, both interaction coefficients were significant at $p<.10$. Adjusted R^2 increased to .08 with addition of the interaction terms. The partial F was also significant (partial $F=3.8$, $p<.05$) indicating a better fit resulted with the interactions included. The increase in explanatory power of ROS was only marginally significant with interactions included (partial $F=2.6$, $p<.10$) and only the BSDxAGE interaction was significant at $p<.10$. In regression of ANSGROW, no AGE interaction was found.

Significant interaction indicates AGE does have moderating influences on the relationship. Moderated regession analysis also allows for the identification of predictor influences. When added as a predictor (regression model 2), the coefficient of AGE was significantly different than zero for all three performance variables. Model fit was significantly improved when AGE was added to regressions of ROIC (partial $F=7.8$, $p<.01$), ROS (partial $F=6.8$, $p<.01$)

and ANSGROW (partial $F=7.8$, $p<.01$). This is consistent with other studies describing AGE as a predictor of firm performance (Kazanjian 1988).

The Sharma, Durand, and Gur-Arie typology of variables describes those factors that enter the regressions significantly as both interaction and predictor terms as "quasi-moderators." They are "quasi" in the sense that although they do influence the form of the relationship, they also are predictive of the criterion. A "pure" moderator would be one only influencing the relationship through interaction and not direct correlation. Moderated regression analysis results support describing firm age as a moderator of the growth direction strategy/ROIC relationship. Profitability can be expected to increase with AGE generally, but the performance of each growth direction strategy is contingent upon the age of the firm. This can be seen when ROIC levels are studied by growth direction and AGE (see Table XXIII).

TABLE XXII

RESULTS OF MODERATED REGRESSION ANALYSIS
WITH AGE AS THE PROPOSED MODERATOR

Criterion:	ROIC			ROS			ANSGROW		
Model:	M1	M2	M3	M1	M2	M3	M1	M2	M3
BSD[1]	.17	.12	.28	.15	.10	.24	.04	.10	.03
(p=)[2]	(.00)	(.04)	(.01)	(.01)	(.09)	(.02)	(.52)	(.10)	(.77)
MNSD	.15	.10	.25	.12	.06	.19	-.07	-.02	-.13
(p=)	(.01)	(.08)	(.02)	(.04)	(.29)	(.10)	(.19)	(.79)	(.25)
AGE	*	.16	.60	*	.16	.53	*	-.18	-.43
(p=)		(.01)	(.00)		(.01)	(.00)		(.01)	(.02)
BSD x AGE	*	*	-.35	*	*	-.29	*	*	.16
(p=)			(.03)			(.07)			(.36)
MNSD x AGE	*	*	-.33	*	*	-.27	*	*	.24
(p=)			(.06)			(.13)			(.19)
Partial F	*	6.5	3.8		6.8	2.6	*	7.8	1.2
(p=)		(.01)	(.02)		(.01)	(.08)		(.01)	(.30)
R^2a	.05	.06	.08	.03	.05	.06	.00	.02	.02
F	8.6	8.0	6.4	6.0	6.4	4.9	1.1	3.4	2.5
(p=)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.33)	(.02)	(.03)
n		318			319			317	

[1] Table entries are standardized beta coefficients.
[2] p values are associated with t-test significance.

It was expected that as firms evolved they would increasingly abandon intensive growth direction in favor of diversification. This characteristic of firm evolution

models is supported by these findings. Over 75 percent of firms 20 or less utilized intensive strategies. This proportion fell to just over 25 percent of firms over age 40.

TABLE XXIII

DIFFERENCES IN ROIC LEVEL
ACROSS FIRM AGE GROUPS

Growth Direction Strategy Group	Firm Age Groups		
	Age 1-20 ROIC	Age 21-40 ROIC	Age 40+ ROIC
INTENSIVE (low MNSD, low BSD) n=159	-.22 n=86	.09 n=41	.08 n=32
RELATED DIVERSIFICATION (high MNSD, low BSD) n=71	-.11 n=16	.00 n=24	.11 n=31
UNRELATED DIVERSIFICATION (low MNSD, high BSD) n=50	.00 n=8	.03 n=19	-.01 n=23
HIGH DIVERSIFICATION (high MNSD, high BSD) n=39	-.02 n=2	.09 n=4	.07 n=33
OVERALL n=319 (p=)[1]	-.19 n=112 (.54)	.05 n=88 (.92)	.07 n=119 (.29)

[1] p value indicates significance of ANOVA F for method group

It was also proposed that intensive growth would yield the best results for the least mature firms. In fact, intensive direction firms had the lowest ROIC (-.22) while an unrelated diversification direction produced the best results for young firms (.00). The difference however is not statistically significant.

For all firms, ROIC increase with AGE. FIrms in their first 20 years averaged negative returns (-.19) while those over 40 years were generating positive returns (.07). This was not true across all growth direction strategies however (see Figure 7). The performance of related diversifiers increased significantly with AGE ($F=3.5$, $p<.05$) although increasing firm age did not appear to influence the performance of unrelated diversifiers. Performance of unrelated diversification strategy actually declined slightly with age. Intensive strategy ROIC also increased significantly across age levels ($F=6.4$, $p<.01$) and high diversification strategy increased but not significantly.

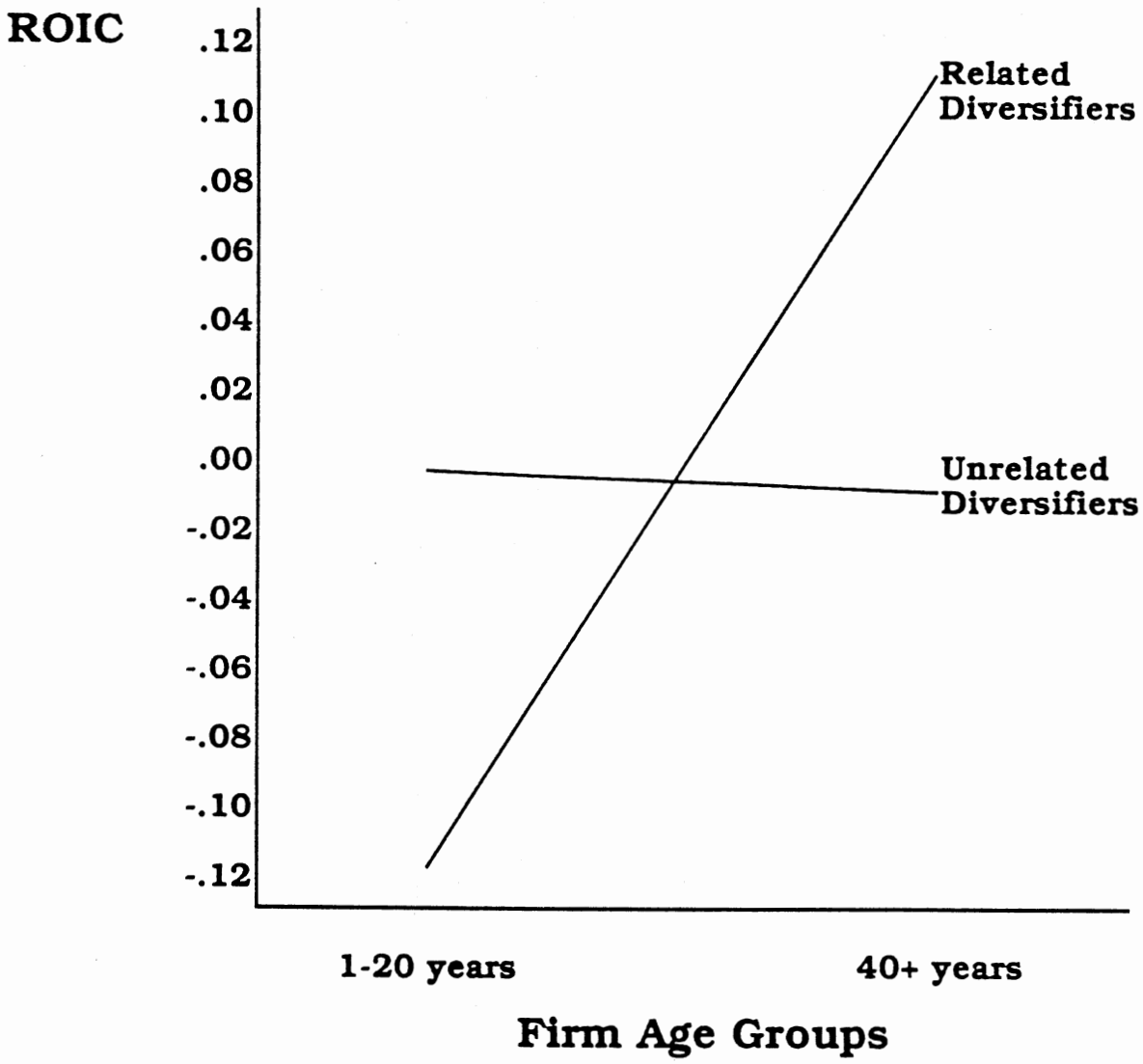

Figure 6. Growth Direction Performance Across Age Groups

In conclusion these findings suggest firm age is an important contingency in predicting the performance of a growth direction strategy. It appears to be unacceptable to generalize growth direction propositions across firms of varying stage of development as indicated by age. Among the oldest, related diversification firms performed best. This is the same conclusion reached in previous research (i.e. Varadarajan 1986). However, unrelated diversification firms were the top performers among the youngest firms sampled.

NEMP As a Moderator

The firm's number of employees was also examined as a moderator of the growth direction strategy/firm performance relationship for each of the three performance measures. The results indicate no support for concluding NEMP is also a moderator.

Moderated regression analysis isolated no significant interactive or predictive effects for NEMP (see Table XXIV). Regression model 3 which included NEMP interactions with BSD and MNSD did not yield a better fit over model 2. Addition of interaction terms actually lowered the adjusted R^2 for regressions of ROIC and ROS. Neither did addition of NEMP as a predictor improve the predictive validity in model 2. The NEMP beta coefficient as well as the corresponding partial F ratios were non-significant.

TABLE XXIV

RESULTS OF MODERATED REGRESSION ANALYSIS
WITH NEMP AS THE PROPOSED MODERATOR

Criterion:	ROIC			ROS			ANSGROW		
Model:	M1	M2	M3	M1	M2	M3	M1	M2	M3
BSD[1]	.11	.10	.10	.13	.12	.14	-.01	-.03	-.04
(p=)[2]	(.03)	(.07)	(.09)	(.01)	(.02)	(.02)	(.88)	(.62)	(.47)
MNSD	.10	.10	.12	.09	.09	.11	-.10	-.11	-.14
(p=)	(.04)	(.05)	(.04)	(.07)	(.08)	(.07)	(.06)	(.04)	(.01)
NEMP	*	.04	.32	*	.01	.32	*	.07	-.55
(p=)		(.47)	(.34)		(.85)	(.33)		(.20)	(.10)
BSD x NEMP	*	*	-.09	*	*	-.15	*	*	.25
(p=)			(.59)			(.37)			(.13)
MNSD x NEMP	*	*	-.21	*	*	-.19	*	*	.41
(p=)			(.41)			(.46)			(.11)
Partial F	*	.53	.36	*	.04	.49	*	1.7	1.8
(p=)		(.47)	(.70)		(.85)	(.61)		(.20)	(.17)
R^2a	.02	.02	.01	.02	.02	.01	.00	.01	.01
F	4.5	3.2	2.0	4.9	3.3	2.2	1.8	1.8	1.8
(p=)	(.01)	(.02)	(.07)	(.01)	(.02)	(.06)	(.16)	(.15)	(.12)
n	389			395			392		

[1] Table entries are standardized beta coefficients.
[2] p values are associated with t-test significance.

With moderated regression analysis identifying no significant influence of NEMP on the growth direction and performance relationship, subgroup analysis is the next step

in the moderator identification paradigm. Firms were divided into two nearly equal groups with NEMP=500 as the division point. Regression model 1 was fitted to each subgroup (see Table XXV). No substantial differences appeared across subgroups. With the possible exception of BSD for the case of ROIC, the direction and significance of beta coefficients differed little. In addition, fit of the models in terms of R^2 did not vary across subgroups.

TABLE XXV

RESULTS OF SUBGROUP REGRESSION ANALYSIS
WITH NEMP AS THE PROPOSED MODERATOR

Criterion:	ROIC		ROSAVG		ANSGROW	
NEMP[1]:	Low	High	Low	High	Low	High
BSD[2]	.04	.13	.12	.11	.00	.02
(p=)[3]	(.57)	(.08)	(.10)	(.14)	(.98)	(.75)
MNSD	.11	.09	.08	.09	-.09	-.09
(p=)	(.14)	(.20)	(.24)	(.21)	(.19)	(.25)
R^2	.01	.02	.02	.02	.01	.01
F	1.3	2.1	2.2	1.7	.86	.77
(p=)	(.26)	(.13)	(.11)	(.19)	(.42)	(.46)
n	198	191	208	187	207	185

[1]Number of employees subgroups are low where NEMP is less than or equal to 500 and high were NEMP is greater than 500.
[2]Table entries are standardized beta coefficients.
[3]p values indicate significance of coefficient t-tests.

In conclusion, NEMP unlike AGE does not moderate growth direction strategy performance. Moderated regression and subgroup analysis indicates that NEMP is not a predictor nor a moderator of growth direction and performance.

Joint Moderators

As a final analysis, conclusions concerning growth method and firm stage of evolution were further tested by examining the two factors concurrently as joint moderators. Results provide further support for the conclusions reached via individual moderator identification analysis.

Because number of acquisitions was identified as a homologizer moderator, the sample was divided into two subgroups. Firms that had not used acquisition as a growth method were separated from those firms that had at least one acquisition. A regression model reflecting the identification of firm age as a quasi-moderator of the growth direction/ROIC association was compared across the two subgroups. The results are summarized in Table XXVI.

TABLE XXVI

RESULTS OF SUBGROUP REGRESSION ANALYSIS
WITH NACQ AS A HOMOLOGIZER MODERATOR
AND AGE AS A QUASI-MODERATOR

Criterion:	ROIC	
Method[1]:	Internal	External
BSD[2]	.11	.40
(p=)[3]	(.39)	(.02)
MNSD	.24	.20
(p=)	(.13)	(.26)
AGE	.46	.69
(p=)	(.03)	(.05)
BSD/AGE	-.20	-.49
(p=)	(.30)	(.10)
MNSD/AGE	-.33	-.27
(p=)	(.17)	(.36)
R^2	.04	.10
F	1.67	2.64
(p=)	(.14)	(.03)
n	200	121

[1]Growth method subgroups are Internal (Int) where NACQ=0 and External (Ext) where NACQ>0.
[2]Table entries are standardized beta coefficients.
[3]p values are associated with coefficient t-test significance.

The fit of the linear model as reflected by the R^2 and F statistics was significantly better for the external method firms. This supports the conclusion that number of

acquisitions is a homologizer moderator. The firm age and BSD/AGE interaction coefficients support classifying firm age as a quasi-moderator for external method firms.

Growth method is a strategic choice that is salient to the success of the growth direction strategy. Firm age is an indicator of firm development stage that has been shown here to be an important situational contingency. Examining both dimensions of growth strategy, direction and method, across firms at various stages of development incorporates these two moderators (see Table XXVII).

Firms were placed into eight groups based upon their growth direction and growth method strategy. For the entire sample, ANOVA indicated significant differences in ROIC across these eight strategy groups ($F=2.32$, $p<.05$). Overall, high diversification direction/external method firms were most successful with a mean ROIC of .10 while intensive direction/internal method firms were least successful of the eight strategies with a ROIC of -.12.

However, when the analysis if futher broken down by firm age, the relationships between strategy and performance levels show great contrast. Note that intensive direction/ internal method firms show a dramatic improvement in ROIC with increasing age. The opposite is true for high diversification and unrelated diversification direction firms using an internal growth method.

TABLE XXVII

DIFFERENCES IN ROIC LEVEL
ACROSS FIRM AGE GROUPS

Growth Direction/ Growth Method Strategy Group	Firm Age Groups Age 1-20 ROIC	Age 21-40 ROIC	Age 40+ ROIC
INTENSIVE/ Internal Method n=128	-.22 n=73	-.03 n=30	.07 n=25
INTENSIVE/ External Method n=30	-.23 n=13	.03 n=10	.12 n=7
RELATED DIVERSIFICATION/ Internal Method n=41	-.19 n=8	.07 n=15	.16 n=18
RELATED DIVERSIFICATION/ External Method n=30	-.03 n=8	-.12 n=9	.06 n=13
UNRELATED DIVERSIFICATION/ Internal Method n=20	.01 n=4	.02 n=8	-.09 n=8
UNRELATED DIVERSIFICATION/ External Method n=30	-.01 n=4	.05 n=11	.04 n=15
HIGH DIVERSIFICATION/ Internal Method n=9	.02 n=1	.11 n=1	-.08 n=7
HIGH DIVERSIFICATION/ External Method n=30	-.05 n=1	.08 n=3	.11 n=26
OVERALL	-.19	.05	.07
R^2 (p=)[1]	.02 (.92)	.08 (.46)	.09 (.15)

[1] p value indicates significance of ANOVA F for method group

Conclusions as to which strategy yields the best performance are greatly different depending upon the group of firms being examined. Table XXVIII rank orders strategies according to their ROIC for two groups: firms of age 1-20 and firms of age 40+. The top three performing strategies among the youngest firms are the bottom three performers among the oldest firms. Both intensive direction strategies, at the bottom of performance among young firms are in the top half of all strategies among the most mature firms.

Growth method and firm age were identified individually as moderators of the growth direction strategy/performance relationship. When examined together, the contingencies these variables form are further highlighted. They are vital to understanding the relationship of corporate growth strategies to corporate performance.

A Summary of the Findings

Hypothesis one proposed that growth method was a moderator of growth direction strategy performance. Limited support was found for the hypothesis. Number of acquisitions did significantly moderate the growth direction strategy/ROIC association. No moderator influence was found for the ROS or ANSGROW indicators of performance.

Although NACQ was found to significantly moderate the strength of the relationship, limited support was also found

TABLE XXVIII

GROWTH STRATEGIES RANK ORDERED ACCORDING TO AVERAGE ROIC PERFORMANCE

Growth Direction/ Growth Method Strategy Group	Firm Age Groups	
	Age 1-20 Rank	Age 40+ Rank
High Diversification/ Internal Method	1 (.02)	7 (-.08)
Unrelated Diversification/ Internal Method	2 (.01)	8 (-.09)
Unrelated Diversification/ External Method	3 (-.01)	6 (.04)
Related Diversification/ External Method	4 (-.03)	5 (.06)
High Diversification/ External Method	5 (-.05)	3 (.11)
Related Diversification/ Internal Method	6 (-.19)	1 (.16)
Intensive/ Internal Method	7 (-.22)	4 (.07)
Intensive/ External Method	8 (-.23)	2 (.12)

for hypothesis 1a and 1b which predicted a moderating of the relationship's form. Hypothesis 1a proposed that an internal growth method would yield superior performance for intensive and related diversification direction strategies. When mean ROIC levels were examined, the hypothesized

direction was found although the differences were not statistically significant. Hypothesis 1b proposed an external method to be superior for unrelated diversification direction firms. Once again the hypothesized direction was found but no statistically signficant differences in ROIC levels.

Hypothesis two proposed a firm's stage of corporate evolution to be a moderator of the growth direction strategy/performance relationship. One indicator of corporate evolution, firm age, was found to moderate the growth direction and ROIC relationship. As a quasi-moderator, firm age was found to affect the form of the strategy/ performance relationship as well as function as a predictor of ROIC. Another evolution indicator, number of employees, was unrelated to growth direction strategy and performance.

Hypothesis 2a was not supported although hypothesis 2b was supported. Intensive direction strategy was proposed to be the superior strategy for less mature firms by hypothesis 2a. Instead, older more-evolved firms faired better with an intensive direction than younger firms. Hypothesis 2b proposed increasing maturity to be positive for the performance of diversification direction strategy. With the exception of unrelated diversification, hypothesis 2b was supported.

These findings provide an insightful contribution to understanding the performance associated with corporate

growth direction strategies. As expected they suggest growth method and stage of firm evolution are important contingencies. The final chapter explores the implications of these results.

CHAPTER V

DISCUSSION, LIMITATIONS, AND FUTURE RESEARCH DIRECTIONS

Introduction

Marketing executives are increasingly being asked to contribute to strategic decision-making at the highest levels of the firm. This emerging role for marketing can be labeled "corporate marketing" to distinguish it from the role of marketing at the business unit and product decision-making levels of an organization.

Today, an important application of corporate marketing is the corporate growth strategy. Firm's with future growth expectations must choose a direction and method for growth. Direction refers to the primary product-market focus of the growth efforts (intensive vs. diversification) while growth method refers to the source of resources and capabilities needed to implemement the growth direction (internal development vs. external acquisition).

Past research has focused on the growth direction aspect of corporate growth direction; namely, the impact of product diversification on performance. This research sought to clarify the growth direction/performance

relationship by examining two potential moderating variables: growth method and stage of corporate evolution.

Results indicate that growth method is an important dimension of corporate growth strategy and should be included in explanations of corporate performance. Also found were differences in strategy performance across stages of firm development as indicated by age. This chapter presents several implications from the research results. Limitations of the study and directions for future research are also included.

Discussion of Major Findings

The major objective of this project was to clarify the nature of a relationship important to corporate marketing strategists. Generating a more precise understanding of the performance associated with various growth direction strategy options is relevant to both the practice of marketing at the corporate level and the building of marketing theory.

Two research questions guided this study. First, what is the role of growth method choice in the performance of growth direction strategies? Second, what is the role of a firm's stage of evolution or development in predicting the performance of a growth direction strategy? Three major conclusions follow from the analysis guided by these basic questions.

First, the findings suggest growth method choice is an important contingency in growth direction stategy performance. Number of acqusitions was found to be a homologizer moderator. The strength of the growth direction strategy/ROIC association varied substantially across internal and external growth method firms. Also there was some evidence, although not statistically significant, that the form of the growth direction strategy/ROIC relationship varied across growth method subgroups.

These findings have important implications. Identification of number of acquisitions as a homologizer indicates that growth direction strategy is not an important determinant of performance among internal method firms. Also, there does appear to be a best growth method for each growth direction. Intensive direction and related diversification direction firms that emphasized internal development rather than external acquisition generated greater returns. On the other hand, acquiring of businesses produced better results for unrelated diversifiers and those highly diversified firms.

The second conclusion derived from this study is that a firm's stage of evolution is also an important contingency in predicting the success of a firm's growth direction. One indicator of firm development, age, was found to be a quasi-moderator of the relationship between growth direction strategy and ROIC. Age has a significant direct positive

correlation with performance. Age also interacts with growth direction significantly to influence performance.

These findings imply that the definition of the best performing growth direction strategy differs across firm evolution stages. Previous growth direction research has associated related diversification strategy with superior performance (e.g. Rumelt 1974; Palepu 1985; Varadarajan 1986). This study indicates this conclusion to be true only for the most evolved firms, those at least 40 years old. Although the group means are not significantly different, the direction of their difference suggests that diversification may be the best growth direction for achieving profitability in a firm's first 20 years of existence. Unrelated diversification was the worst performing direction among the most developed firms but the most successful strategy among the youngest firms sampled.

Two possible explanations for the unrelated diversification's superior performance among less evolved firms can be offered. Because younger firms are less organizationally complex unrelated business operations may be more easily folded into the existing firm. As firms mature into more complex structures, incorporation of unrelated businesses grows increasingly difficult and therefore mean performance levels can be expected to fall. However, this finding may also indicate reverse causality as is described below in the study's limitations.

The implication of the above for researchers is obvious. It appears that relationships reported for large, evolved firms cannot be generalized to explain the performance of small, emerging firms. More insight is needed to explain the particular marketing situations of less developed firms.

A third conclusion from this research pertains to the concepualization of corporate growth strategy described in Chapter I. There is evidence to support broadening the previous research focus on growth direction alone to a two-dimensional conceptualization incorporating both growth direction and method. Significant differences in performance were found across firms categorized by a combination of their growth method and direction. Firms at the two extremes of the strategic continuum (intensive direction/internal method and high diversification direction/external method) had significantly different mean ROIC.

This broadened definition of corporate growth strategy also varied across firm stage of evolution groups. Rank orderings of strategies by their relative performance were nearly reversed when the youngest and most mature firms were compared.

Because many of the relationships described are not statistically significant, normative statements derived from this study should be interpreted with appropriate caution.

However, the results indicate the following guidelines to be appropriate descriptions of product diversification.

(1) Firms wishing to limit product diversity by pursuing an intensive or related diversification growth direction should rely upon internal development not external acquisition as their method of achieving growth.

(2) Firms seeking growth by operating in a diversity of product-markets through either a unrelated or high diversification direction should acquire rather than attempt to internally develop the capabilities and resources necessary for growth.

(3) Product diversification early in firm development, even unrelated diversification, can be a successful growth direction strategy. However, limited product diversity strategies will in the long run be the most profitable.

Limitations

Important limitations exist in the interpretation of these research results. The broad nature of the measures employed, cross-sectional research design, and composition of the sample all serve to temper the conclusions that can be derived from this study.

In Chapters I and II, a case was built for important relationships among growth direction, method, firm evolution, and corporate performance. The measures chosen by necessity were broad indicators of the overall construct. The limited availability of firm information made number of

acquisitions and firm age the best indicators possible of the overall constructs. They capture the broad outlines of the construct but are not precise. This may explain why many of the findings were in the expected direction but were not of a magnitude to be statistically significant.

Also the performance indicators chosen capture the broad dimensions of corporate performance but also may be biased. Firms may use one of two accounting treatments of acquired operations. They may treat the acquisition as a purchase or they may pool acquired assets with existing. What results may be two very different return indicators for the same firm and acquisition. The purchase versus pooling choice is not evident within the performance measures employed and cannot be controlled in the analysis thereby introducing the potential for bias.

Another shortcoming in the measurement of performance is in interpretation of performance differences between internal and external growth method firms. Because acquiring firms "buy" return while internal method firms "earn" it, external method firms may be able to report profitable returns quickly rather than internal method firms whose internal development may require a longer term to yield returns. Therefore, the three-year average ROIC and ROS may distort the performance differences between internal and external method firms.

Other limitations are due to the cross-sectional nature of the research design employed in this study. A cross-

section of the manufacturing firm population at one point in time constitutes the sample. As a result, causality is unclear. Young firms may, for example, diversify into unrelated products because they are profitable or become profitable because they diversify. This limitation plagues nearly all stategy research and raises justifiable concern with interpretation of the entire strategy literature. However, the time constraints and data availability limits of longitudinal research serve to make cross-sectional designs a necessary evil in much research.

Another noteworthy limitation followed from the composition of the sample collected. The sample produced a cross-section of manufacturing concerns of various size. Approximately one-half of the sample fell into one growth direction strategy group: intensive growth direction firms. This reflects the fact that most firms do not diversify to any real extent (a fact overlooked by past research focus on Fortune 500 firms). It also created sample size problems in this study. The remaining half of the sample were divided throughout three other strategy groups and when these were further divided by growth method or firm age, the n of many cells to be analyzed became too small (see for example Table XXVI). This severely limits the statistical power of various tests.

Future Directions For Research

A major contribution of this research is the illumination of several important future paths for scientific inquiry. These include:

(1) Measure development for the growth direction strategy and firm evolution constructs. The measure of growth method employed here was more successful in explaining variance when the firms studied were over 40 years into their evolution. Perhaps more appropriate growth direction measures exist for the study of relatively new enterprises. More generally, the construct of firm evolution itself has been poorly defined for measurement. The use of firm age as an indicator has been successful in this study but the need clearly exists for more precise, multi-dimensional measures.

(2) Examination of young, emerging firms and less exclusive focus on only the largest U.S. corporations. Firm age moderates the performance of growth direction strategies. Perhaps other marketing strategies are contingent upon the firm's stage of development. Most established empirical relationships have yet to be applied to firms early in development although clearly their are fundamental differences between emerging firms and those in the Fortune 500.

(3) Clarification of causal direction. Existing research makes it impossible to conclude if a particular growth strategy causes increased profitability or whether

the existence of profits leads a firm to adopt a particular growth direction. Longitudinal methodologies in lieu of more cross-sectional work should be a primary future research focus. In this study, unrelated and high diversification strategies were found to be associated with the highest levels of ROIC among firms early in evolution. This unexpected relationship may be explained by firms achieving profitability and then embarking upon a diversification path. Longitudinal research is necessary to clarify the relationship.

The findings of this research contribute to the growing literature on corporate marketing. The importance of product diversification to a firm's performance has already been established in research across several disciplines. This research provides important elaboration. Conclusions from the relationships found indicate the use of product diversification in corporate marketing strategies to be more complex than currently described. A firm's choice of growth method as well as its stage of evolution moderate the outcomes to be expected from corporate growth direction strategy. Although insightful, the findings suggest the need to explore other avenues of inquiry into corporate marketing.

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VITA

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